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1 米国における登録農薬のReference Dose (ADI)

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The U.S. EPA Reference Dose Tracking Report

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The Reference Dose Tracking Report is a semi-annual report prepared by the U.S. Environmental Protection Agency's Office of Pesticide Programs. The report contains pesticide toxicology data from the Health Effects Division such as RfD, NOEL, LEL, carcinogenicity, and laboratory animal effects. As additional data is submitted by registrants, the information will be updated and data gaps filled. A glossary is provided to explain acronyms and category types. Data valid as of 02/25/97.

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EPA Tracking Report
Glossary

Acronyms

ADI	– Internal OPP Classification
CAG	– Cancer Assessment Group
CANC	– Carcinogenicity Classification
ChE	– Cholinesterase
CRAVE	– Carcinogen Risk Assessment Verification Endeavor
Decr	– Decreased
Def.	– Deferred
Defer.	– Deferred
EPA RFD	– Environmental Protection Agency Reference Dose
F	– Female
HCPRC	– Health Effects Division Carcinogenicity Peer Review Committee
HDT	– Highest dose tested
HED	– Health Effects Division
(I)	– Inhalation (ug/cu.m)
IARC	– International Agency for Research on Cancer, World Health Organization
Incr	– Increased
Int.	– Interim
IRIS	– Integrated Risk Information System
LDT	– Lowest dose tested
LEL	– Lowest Effect Level
M	– Male
NOEL	– No Observable Effect Level
(O)	– Oral (mg/kg/day)
OPP	– Office of Pesticide Programs
OPP RfD	– Office of Pesticide Programs Reference Dose
ORD	– Office of Research and Development
PADI	– Internal OPP Classification
Pend.	– Pending
PLD	– Internal OPP Classification
Q*	– Potency Q* value (Oral – mg/kg/day; Inhalation – ug/cu.m)
RFDC	– Health Effects Division Reference Dose / Peer Review Committee

SAP – FIFRA Scientific Advisory Panel
SAB – Scientific Advisory Board
UF – Uncertainty factor
Wt – Weight
WHO RfD – World Health Organization Reference Dose

Category Types

EPA WEIGHT-OF-THE-EVIDENCE CATEGORIES

Group A – Human carcinogen

Group B – Probable human carcinogen

B1 – Indicates limited human evidence
B2 – Indicates sufficient evidence in animals and inadequate or no evidence in humans

Group C – Possible human carcinogen

Group D – Not classifiable as to human carcinogenicity

Group E – Evidence of noncarcinogenicity for humans

PROPOSED EPA WEIGHT-OF-THE-EVIDENCE CATEGORIES

Known/Likely – This category of descriptors is appropriate when the available tumor effects and other key data are adequate to convincingly demonstrate carcinogenic potential for humans.

Cannot Be Determined – This category of descriptors is appropriate when available tumor effects or other key data are suggestive or conflicting or limited in quantity and, thus, are not adequate to convincingly demonstrate

carcinogenic potential for humans.

Not Likely – This is the appropriate descriptor when experimental evidence is satisfactory for deciding that there is no basis for human hazard concern.

IARC CATEGORIES

Group 1 – The agent (mixture) is carcinogenic to humans

Group 2A – The agent (mixture) is probably carcinogenic to humans

Group 2B – The agent (mixture) is possibly carcinogenic to humans

Group 3 – The agent (mixture, exposure circumstance) is not classifiable as to its carcinogenicity

Group 4 – The agent (mixture, exposure circumstance) is probably not carcinogenic to humans

OFFICE OF PESTICIDES PROGRAMS REFERENCE DOSE TRACKING REPORT

CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
(2-Naphthoxy)acetic acid CAS: 120-23-0 EPA Chem Code: 055601 CASWELL: 591 CFR: 180.148 CFR185: REG_GROUP:	90d feeding- dog NOEL: 0 mg/kg/day 0 ppm LEL: 12 mg/kg/day 0 ppm LIST B Cancer: Undetermined.	Bleeding gums, necrosis of lips and gums - NOEL not established. No carcinogenicity data available.	PLD UF: 10000 OPPADI: 0.0012 RFD: 0 WHOADI: 0 QSTAR: 0	Chronic feeding- dog Chronic feed/carcino- Reproduction- rat Developmental tox- 2 Extra UF of 10 due to extensive data gaps.	HED reviewed 08/15/86 HED reassess 04/03/87 EPA deferred 03/23/88 Insufficient data for RfD evaluation.
1-Chloro-2-nitropropane CAS: 2425-66-3 EPA Chem Code: 011302 CASWELL: 201A CFR: 180.286 CFR185: REG_GROUP:	NOEL: 0 mg/kg/day 0 ppm LEL: 0 mg/kg/day 0 ppm Cancer.		UF: 0 OPPADI: 0 RFD: 0 WHOADI: 0 QSTAR: 0		
2,4,5-T acid (+ salts) CAS: 93-76-5 EPA Chem Code: 082001 CASWELL: 881 CFR: CFR185: REG_GROUP:	2yr feeding- rat NOEL: 3 mg/kg/day 0 ppm LEL: 10 mg/kg/day 0 ppm Cancer. Negative- 1	Incr urinary excretion of coproporphyrins in mineralization of renal pelvis in female. No evidence of in rats; no mouse study.	PADI UF: 300 OPPADI: 0.01 RFD: 0.01 WHOADI: 0.03 QSTAR: 0	Chronic feeding- dog [Syn. Trichlorophenoxy- acetic Acid, 2,4,5-]	WHO reviewed 1981 EPA verified 12/02/85 EPA revised 05/14/86 HED reviewed 10/30/87 EPA verified 01/20/88 On IRIS.
2,4-D (acid + salts) CAS: 94-75-7 EPA Chem Code: 030001 CASWELL: 315 CFR: 180.142 CFR185: 185.1450 REG_GROUP:	1yr feeding- dog NOEL: 1 mg/kg/day 0 ppm LEL: 5 mg/kg/day 0 ppm LIST A - Cancer. D (HED/SAP)	Alterations in serum chemistry histopathological lesions in the liver & kidneys.	ADI UF: 100 OPPADI: 0.01 RFD: 0.01 WHOADI: 0.3 QSTAR: 0	No data gaps. [Syn. Dichlorophenoxy- acetic acid, 2,4-]	WHO reviewed 1975 EPA verified 02/05/86 HED reviewed 12/11/87 EPA deferred 02/25/88 RfD/PR reviewed
2,4-DB (acid + salts) CAS: 94-82-6 EPA Chem Code: 030801 CASWELL: 316 CFR: 180.331 CFR185: REG GROUP:	2yr feeding- rat NOEL: 3 mg/kg/day 0 ppm LEL: 30 mg/kg/day 0 ppm LIST A (6C) Cancer. Undetermined.	Decr body weight gain in males and females.	PADI UF: 300 OPPADI: 0.01 RFD: 0.008 WHOADI: 0 QSTAR: 0	Chronic feeding- dog (Extra UF of 3 was since dogs appears to the more sensitive species).	EPA verified 05/31/85 EPA verified 06/17/85 HED Adhoc 08/30/88 On IRIS.

OFFICE OF PESTICIDES PROGRAMS REFERENCE DOSE TRACKING REPORT

CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
2-Benzyl-4-chlorophenol CAS: 120-32-1 EPA Chem Code: 062201 CASWELL: 083 CFR: CFR185: REG_GROUP:	2yr feeding- rat NOEL: 0 mg/kg/day 0 ppm LEL: 30 mg/kg/day 0 ppm LIST B Cancer: C (HCPRC)	Incr severity of kidney nephropathy (M); Incr urinary coproporphyrin (M). Evidence of genicity in M mice (kidn- ey) & M rats (kidney).	PADI UF: 3000 OPPADI: 0.01 RFD: 0 WHOADI: 0 QSTAR: 0	[Syn. phenol]	RfD/PR review 03/23/95
2-Ethyl-1.3 hexanediol CAS: 94-96-2 EPA Chem Code: 041001 CASWELL: 445 CFR: CFR185: REG_GROUP:	NOEL: 0 mg/kg/day 0 ppm LEL: 0 mg/kg/day 0 ppm LIST A - No Cancer.		UF: 0 OPPADI: 0 RFD: 0 WHOADI: 0 QSTAR: 0	No food use. [Syn. 6-12]	
4-CPA, and salts CAS: 122-88-3 EPA Chem Code: 019401 CASWELL: 204 CFR: 180.202 CFR185: REG_GROUP:	13wk feeding- dog NOEL: 18.58 mg/kg/day 500 ppm LEL: 0 mg/kg/day 0 ppm LIST B Cancer.	No effects were at any dose tested.	PLD UF: 3000 OPPADI: 0.006 RFD: 0 WHOADI: 0 QSTAR: 0	Chronic feed/carcino- Chronic feeding - dog Reproduction - rat Develop tox - rat/rabbit [Syn. ic acid]	RfD/PR reviewed EPA deferred 12/09/94
AC 263,222 (Cadre herbicide) CAS: 81334-60-3 EPA Chem Code: 129041 CASWELL: CFR: CFR185: REG_GROUP:	1yr feeding- dog NOEL: 0 mg/kg/day 0 ppm LEL: 137 mg/kg/day 5000 ppm Newchemical Cancer: E (RfD/PR	Minimal degeneration or necrosis w/minimal lymphocyte & infiltration in skeletal muscle of the thigh &/or abdomen of M&F.	ADI UF: 300 OPPADI: 0.5 RFD: 0 WHOADI: 0 QSTAR: 0	No data gaps. [This is the free acid form of Cadre; the nium salt is 128943, CASRN is 104098-49-9.	RfD/PR reviewed EPA verified 12/09/94 RfD/PR reviewed
Acephate CAS: 30560-19-1 EPA Chem Code: 103301 CASWELL: 002A CFR: 180.108 CFR185: 185.100 REG GROUP:	90d feeding- rat NOEL: 0 mg/kg/day 0 ppm LEL: 0.12 mg/kg/day 2 ppm LIST A (6C) Cancer: C (HED)	Inhibition of brain ChE. Evidence of ity in mice (hepatocell- ular carcinoma).	ADI UF: 30 OPPADI: 0.004 RFD: 0.004 WHOADI: 0.03 QSTAR: 0	No data gaps. 2yr rat feeding study critical: LEL=0.25 mg/kg; inhibition of brain, RBC, and plasma ChE activity.	EPA deferred 11/25/86 HED reviewed 09/16/88 HED reviewed 02/09/89 EPA verified 01/18/89 WHO reviewed 1990 On IRIS.

OFFICE OF PESTICIDES PROGRAMS REFERENCE DOSE TRACKING REPORT

CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Acetochlor CAS: 34256-82-1 EPA Chem Code: 121601 CASWELL: 003B CFR: CFR185: REG_GROUP:	1yr feeding- dog NOEL: 2 mg/kg/day 0 ppm LEL: 10 mg/kg/day 0 ppm Newchemical Cancer: B2 (HED/SAP)	Testicular & kidney effects; salivation; change in liver enzymes Evidence of ity in rats (nose/liver) & mice (multiple sites).	ADI UF: 100 OPPADI: 0.02 RFD: 0.02 WHOADI: 0 QSTAR: 0.0169	No data gaps.	RfD/PR reviewed EPA deferred 03/27/91 RfD/PR reviewed EPA verified 03/24/92 On IRIS.
Acetone CAS: 67-64-1 EPA Chem Code: 044101 CASWELL: 004 CFR: CFR185: REG_GROUP:	90d gavage - rat NOEL: 100 mg/kg/day 0 ppm LEL: 900 mg/kg/day 0 ppm List D Cancer: D (CRAVE)	Increased liver & kidney weights &	UF: 1000 OPPADI: 0 RFD: 0.1 WHOADI: 0 QSTAR: 0		EPA verified 12/18/86 EPA verified 05/30/86 EPA deferred 07/21/93 On IRIS.
Acifluorfen, sodium CAS: 62476-59-9 EPA Chem Code: 114402 CASWELL: 755D CFR: 180.383 CFR185: REG_GROUP:	2gen reprod- rat NOEL: 1.25 mg/kg/day 25 ppm LEL: 25 mg/kg/day 500 ppm LIST B Cancer: B2 (HED)	Decreased survival, increased incidence of kidney lesions. Evidence of ity in mice; negative in rats.	PADI UF: 100 OPPADI: 0.013 RFD: 0.013 WHOADI: 0 QSTAR: 0.107	Chronic feeding- dog Carcinogenicity- rat (both Supplementary) [Syn. Tackle/Blazer]	HED reviewed 12/12/86 EPA verified 12/16/86 On IRIS.
Acrinathrin CAS: 101007-06-1 EPA Chem Code: 129141 CASWELL: CFR: CFR185: REG_GROUP:	NOEL: mg/kg/day ppm LEL: mg/kg/day ppm Newchemical Cancer: D (RfD/PR	2-Yr Study in rats was uate (MTD issue).	UF: OPPADI: RFD: WHOADI: QSTAR:	No RfD was established due to data gaps & the quality of results from other studies.	RfD/PR reviewed
Acrolein (Acrylaldehyde) CAS: 107-02-8 EPA Chem Code: 000701 CASWELL: 009 CFR: CFR185: REG GROUP:	NOEL: 0 mg/kg/day 0 ppm LEL: 0 mg/kg/day 0 ppm LIST B Cancer: C (CRAVE)	Evidence of ity in rats (adrenal).	UF: 0 OPPADI: 0 RFD: 0 WHOADI: 0 QSTAR: 0		

OFFICE OF PESTICIDES PROGRAMS REFERENCE DOSE TRACKING REPORT

CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Acrylic acid CAS: 79-10-7 EPA Chem Code: CASWELL: 009A CFR: CFR185: REG_GROUP:	3mo drinking- rat NOEL: 83 mg/kg/day 0 ppm LEL: 250 mg/kg/day 0 ppm Cancer.	Reduced body organ altered organ wts.	UF: 1000 OPPADI: 0 RFD: 0.08 WHOADI: 0 QSTAR: 0	Critical study and data base not reviewed by RfD/PR Committee.	EPA verified 08/19/85 On IRIS.
Acrylonitrile CAS: 107-13-1 EPA Chem Code: 000601 CASWELL: 010 CFR: CFR185: REG_GROUP:	60d gavage - NOEL: 1 mg/kg/day 0 ppm LEL: 10 mg/kg/day 0 ppm Cancer. B1 (CRAVE)	Seminiferous tubule degeneration, sperm count.	UF: 1000 OPPADI: 0.001 RFD: 0.001 WHOADI: 0 QSTAR: 0.54	Critical study and data base not reveiwed by RfD/PR Committee. Oral Q* = 5.4 E-1 Inhalation Q* = 6.8 E-5	WHO reviewed 1965; not established. EPA verified 06/15/93
Alachlor CAS: 15972-60-8 EPA Chem Code: 090501 CASWELL: 011 CFR: 180.249 CFR185: REG_GROUP:	1yr feeding- dog NOEL: 1 mg/kg/day 0 ppm LEL: 3 mg/kg/day 0 ppm LIST A (3 SR) Cancer. Unclassified	Hemosiderosis, anemia.	ADI UF: 100 OPPADI: 0.01 RFD: 0.01 WHOADI: 0 QSTAR: 0	No data gaps.	HED reviewed 02/21/86 EPA verified 03/11/86 EPA verified 03/27/91 RfD/PR reviewed RfD/PR reviewed On IRIS.
Aldicarb (Temik) CAS: 116-06-3 EPA Chem Code: 098301 CASWELL: 011A CFR: 180.269 CFR185: 185.150 REG_GROUP:	Human exposure NOEL: 0.01 mg/kg/day 0 ppm LEL: 0.025 mg/kg/day 0 ppm LIST A Cancer. D (CRAVE)	Sweating. Two addition human sure studies, Union ide 1974 & Goldman et 1990 were co-principal studies.	ADI UF: 10 OPPADI: 0.001 RFD: 0.001 WHOADI: 0.003 QSTAR: 0	EPA is preparing a Data Call In for aldicarb that is expected to call for further neurotoxicity studies & a rat dominant lethal study.	WHO reviewed 1982 RfD/PR reviewed EPA deferred 09/22/92 EPA verified 10/15/92 WHO reviewed 1992 On IRIS.
Aldicarb sulfone- Aldoxycarb CAS: 1646-88-4 EPA Chem Code: 110801 CASWELL: 011AA CFR: CFR185: REG GROUP:	1yr feeding- dog NOEL: 0.11 mg/kg/day 5 ppm LEL: 0.58 mg/kg/day 25 ppm 3 SR Cancer. Negative- 1	Brain ChE inhibition No evidence of enicity in mice; undetermined in rats.	PADI UF: 100 OPPADI: 0.001 RFD: 0.001 WHOADI: 0 QSTAR: 0	Chronic feed/carcino- Developmental tox-	HED reviewed 04/20/88 HED reviewed 06/07/90 EPA verified 06/20/90 RfD/PR reviewed EPA verified 09/22/92 On IRIS.

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CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Aldrin CAS: 309-00-2 EPA Chem Code: 045101 CASWELL: 012 CFR: 180.135 CFR185: REG_GROUP:	2yr feeding- rat NOEL: 0 mg/kg/day 0 ppm LEL: 0.025 mg/kg/day 0.5 ppm LIST A Cancer. B2 (CRAVE)	Increased liver weight, histo changes in liver. NOEL not established. Evidence of ity in mice.	PADI UF: 1000 OPPADI: 0.00003 RFD: 0.00003 WHOADI: 0.0001 QSTAR: 17	Reproduction- rat Developmental tox- rat Developmental tox- Oral Q*: 17 E+0 Inhalation Q*: 4.9 E-3	WHO reviewed 1977 - is for combined aldrin/ /dieldrin residues. EPA verified 12/18/85 HED reviewed 08/08/86 On IRIS.
Alkyl imidazolines CAS: 61791-39-7 EPA Chem Code: 046609 CASWELL: 486D CFR: CFR185: REG_GROUP:	NOEL: 0 mg/kg/day 0 ppm LEL: 0 mg/kg/day 0 ppm LIST C Cancer.	Since this chemical is not intended for food uses & since chronic or life time exposure is an unlikely scenario, an was not established.	UF: OPPADI: 0 RFD: 0 WHOADI: 0 QSTAR: 0	Name: 2-imidazoline (as in fatty acids of tall oil)	RfD/PR reviewed
Allethrin CAS: 584-79-2 EPA Chem Code: 004001 CASWELL: 025 CFR: 180.113 CFR185: REG_GROUP:	NOEL: 0 mg/kg/day 0 ppm LEL: 0 mg/kg/day 0 ppm LIST A (6C) Cancer.		UF: 0 OPPADI: 0 RFD: 0 WHOADI: 0 QSTAR: 0	Insufficient data for RfD determination. Two developmental tox studies have been ed.	WHO reviewed 1965; not established. Ad Hoc Meeting
Allidochlor (Randox/CP 6343) CAS: 93-71-0 EPA Chem Code: 019301 CASWELL: 284 CFR: 180.282 CFR185: REG_GROUP:	NOEL: 0 mg/kg/day 0 ppm LEL: 0 mg/kg/day 0 ppm Cancer.		UF: 0 OPPADI: 0 RFD: 0 WHOADI: 0 QSTAR: 0		
Allyl alcohol CAS: 107-18-6 EPA Chem Code: 068401 CASWELL: 026 CFR: CFR185: REG GROUP:	15-wk drinking- rat NOEL: 4.8 mg/kg/day 50 ppm LEL: 6.9 mg/kg/day 100 ppm Cancer.	Impaired renal function and increased liver and kidney weights.	UF: 1000 OPPADI: 0 RFD: 0.005 WHOADI: 0 QSTAR: 0	Critical study and data base not reviewed by RfD/PR Committee.	EPA verified 02/26/86 On IRIS.

OFFICE OF PESTICIDES PROGRAMS REFERENCE DOSE TRACKING REPORT

CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Aluminum CAS: 7429-90-5 EPA Chem Code: 000111 CASWELL: 028A CFR: CFR185: REG_GROUP:	NOEL: 0 mg/kg/day 0 ppm LEL: 0 mg/kg/day 0 ppm List D Cancer.		UF: OPPADI: 0 RFD: 0 WHOADI: 0 QSTAR: 0		EPA deferred 08/03/94
Aluminum phosphide CAS: 20859-73-8 EPA Chem Code: 066501 CASWELL: 031 CFR: 180.225 CFR185: 185.200 REG_GROUP:	2yr feeding-rat NOEL: 0.043 mg/kg/day 0.99 ppm LEL: 0 mg/kg/day 0 ppm LIST A (6B) Cancer. Undetermined	No effects noted at Doses corrected for amount of aluminum phide in feed. (This study used by ORD, no better data available).	PADI UF: 100 OPPADI: 0.0004 RFD: 0.0004 WHOADI: 0 QSTAR: 0	Data are insufficient at present to assign a valid RFD, therefore TOX will use the value set by pending submission of additional data.	WHO determined no ADI necessary on basis of residues in food (1966). EPA complete 08/19/85 HED pending 08/29/86 On IRIS.
Ametryn CAS: 834-12-8 EPA Chem Code: 080801 CASWELL: 431 CFR: 180.258 CFR185: REG_GROUP:	90d feeding-rat NOEL: 8.6 mg/kg/day 0 ppm LEL: 860 mg/kg/day 0 ppm LIST B Cancer. Undetermined.	Liver toxicity, lung congestion; doses by gavage, 6 of 7 No carcinogenicity data available.	PLD UF: 1000 OPPADI: 0.009 RFD: 0.009 WHOADI: 0 QSTAR: 0	Chronic feeding-dog Chronic feed/carcino- Reproduction-rat	HED reviewed 12/05/86 EPA pending 12/16/86 EPA verified 02/18/87 On IRIS.
Aminobutane-2 CAS: 13952-84-6 EPA Chem Code: 004214 CASWELL: 125 CFR: 180.321 CFR185: REG_GROUP:	NOEL: 0 mg/kg/day 0 ppm LEL: 0 mg/kg/day 0 ppm Cancer.		UF: 0 OPPADI: 0 RFD: 0 WHOADI: 0 QSTAR: 0		WHO reviewed 1984; not established.
Aminocarb CAS: 2032-59-9 EPA Chem Code: 044401 CASWELL: 360 CFR: CFR185: REG GROUP:	NOEL: 0 mg/kg/day 0 ppm LEL: 0 mg/kg/day 0 ppm LIST B Cancer.		UF: 0 OPPADI: 0 RFD: 0 WHOADI: 0 QSTAR: 0		WHO reviewed 1979; not established.

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CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Aminopyridine-4	3mo feeding- rat	Hyperirritability.	UF: 1000	Critical study and data	Ad Hoc Meeting
CAS: 504-25-5	NOEL: 0.15 mg/kg/day		OPPADI: 0.0002	base not reviewed by	
EPA Chem Code: 069201	3 ppm		RFD: 0	RfD/PR Committee.	
CASWELL: 038	LEL: 1.5 mg/kg/day		WHOADI: 0		
CFR: 180.312	30 ppm		QSTAR: 0		
CFR185:					
REG_GROUP:	LIST A (6A) Cancer: D (CRAVE)				
Amitraz	2yr feeding- dog	Increased blood	ADI UF: 100	No data gaps.	HED reviewed 07/24/87
CAS: 33089-61-1	NOEL: 0.25 mg/kg/day	slight hypothermia after	OPPADI: 0.0025		EPA verified 10/14/87
EPA Chem Code: 106201	0 ppm	dosing.	RFD: 0.0025		WHO reviewed 1990
CASWELL: 374A	LEL: 1 mg/kg/day	No evidence of	WHOADI: 0.003		RfD/PR reviewed
CFR: 180.287	0 ppm	nicity in rats, equivocal	QSTAR: 0.0497		
CFR185:		data in mouse			On IRIS.
REG_GROUP:	LIST A (6C) Cancer: C (CAG); D (SAP)				
Amitrole			UF: 0	Since this chemical is	WHO reviewed 1977;
CAS: 61-82-5	NOEL: 0 mg/kg/day		OPPADI: 0	not intended for food	conditional.
EPA Chem Code: 004401	0 ppm		RFD: 0	uses & since chronic or	WHO reviewed 1993;
CASWELL: 040	LEL: 0 mg/kg/day	Evidence of	WHOADI: 0.0005	life time exposure is an	temporary.
CFR:	0 ppm	ity in rats (thyroid) &	QSTAR: 1.1302	unlikely scenario, an	RfD/PR reviewed
CFR185:		mice (liver).		was not established.	RfD/PR reviewed
REG_GROUP:	LIST A Cancer: B2 (HED)				
Ammonium sulfamate	90d feeding- rat	Decreased body weight	PLD UF: 1000	Chronic feed/carcino-	HED reviewed 04/07/86
CAS: 7773-06-0	NOEL: 214 mg/kg/day	gain.	OPPADI: 0.2	Chronic feeding- dog	EPA verified 06/24/86
EPA Chem Code: 005501	5000 ppm	(Actual dose tested).	RFD: 0.2	Developmental tox- rat	HED reviewed 07/18/88
CASWELL: 047	LEL: 429 mg/kg/day		WHOADI: 0	Developmental tox-	EPA verified 07/20/88
CFR: 180.188	10000 ppm	No carcinogenicity data	QSTAR: 0		
CFR185:		available.			On IRIS.
REG_GROUP:	LIST A (6A) Cancer: Undetermined				
Ancymidol			UF:	Since this chemical is	RfD/PR reviewed
CAS: 12771-68-5	NOEL: 0 mg/kg/day		OPPADI: 0	not intended for food	
EPA Chem Code: 108601	0 ppm		RFD: 0	uses & since chronic or	
CASWELL: 051A	LEL: 0 mg/kg/day		WHOADI: 0	life time exposure is an	
CFR:	0 ppm		QSTAR: 0	unlikely scenario, an	
CFR185:				RfD was not	
REG GROUP:	LIST C Cancer:				

OFFICE OF PESTICIDES PROGRAMS REFERENCE DOSE TRACKING REPORT

CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Anilazine (Dyrene) CAS: 101-05-3 EPA Chem Code: 080811 CASWELL: 302 CFR: 180.158 CFR185: REG_GROUP:	2yr feeding- rat NOEL: 0 mg/kg/day 0 ppm LEL: 1.25 mg/kg/day 25 ppm LIST A (6A) Cancer.		UF: 3000 OPPADI: 0.0004 RFD: 0 WHOADI: 0.1 QSTAR: 0	Critical study and data base not reviewed by RfD/PR Committee.	WHO reviewed 1989
Aramite CAS: 140-57-8 EPA Chem Code: 062501 CASWELL: 131 CFR: 180.107 CFR185: REG_GROUP:	NOEL: 0 mg/kg/day 0 ppm LEL: 0 mg/kg/day 0 ppm Cancer: B2 (CRAVE)		UF: 0 OPPADI: 0 RFD: 0 WHOADI: 0 QSTAR: 0.025	Oral Q*: 2.5 E-2 Inhalation: 7.1 E-6	EPA deferred 01/17/90 EPA deferred 03/21/90 EPA deferred 02/20/91
Arsenic acid CAS: 7778-39-4 EPA Chem Code: 006801 CASWELL: 056 CFR: 180.180 CFR185: REG_GROUP:	Chronic feeding- NOEL: 0.42 mg/kg/day 0 ppm LEL: 0 mg/kg/day 0 ppm LIST A (6B) Cancer.		PADI UF: 100 OPPADI: 0.0042 RFD: 0 WHOADI: 0 QSTAR: 0	Critical study and data base not reviewed by RfD/PR Committee.	RFD NOT VERIFIED BY AGENCY COMMITTEES.
Aspon (NPD) CAS: 3244-90-4 EPA Chem Code: 079101 CASWELL: 845A CFR: CFR185: REG_GROUP:	NOEL: 0 mg/kg/day 0 ppm LEL: 0 mg/kg/day 0 ppm LIST A - Cancer.		UF: 0 OPPADI: 0 RFD: 0 WHOADI: 0 QSTAR: 0		
Asulam CAS: 3337-71-1 EPA Chem Code: 106901 CASWELL: 062A CFR: 180.360 CFR185: REG GROUP:	2yr feeding- rat NOEL: 36 mg/kg/day 0 ppm LEL: 180 mg/kg/day 0 ppm LIST A (6C) Cancer. C (HED)	Hyperplasia of thyroid follicles & adrenal medulla (males). Evidence of ity in male rats; inconclusive in mice.	ADI UF: 100 OPPADI: 0.36 RFD: 0.05 WHOADI: 0 QSTAR: 0	Chronic feeding- dog Developmental tox- rat (both Supplementary).	HED reviewed 07/31/87 EPA verified 08/12/87 RfD/PR reviewed RfD/PR reviewed EPA deferred 12/08/94 On IRIS.

OFFICE OF PESTICIDES PROGRAMS REFERENCE DOSE TRACKING REPORT

CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Atrazine	2yr feeding- rat	Decreased body weight	ADI UF: 100	No data gaps.	EPA verified 02/21/90
CAS: 1912-24-9	NOEL: 3.5 mg/kg/day	gain.	OPPADI: 0.035		RfD/PR reviewed
EPA Chem Code: 080803	70 ppm		RFD: 0.035		RfD/PR reviewed
CASWELL: 063	LEL: 25 mg/kg/day		WHOADI: 0		EPA deferred 11/04/92
CFR: 180.220	500 ppm	Evidence of	QSTAR: 0.22		EPA verified 12/17/92
CFR185:		ity in rats (mammary).			On IRIS.
REG_GROUP:	LIST A (5 Cancer: C(q) (HED); C				
Avermectin B1	2gen reprod- rat	Incr retinal folds in	ADI UF: 300	No data gaps.	HED reassess 06/12/87
CAS: 65195-55-3	NOEL: 0.12 mg/kg/day	weanlings, decr viabili-	OPPADI: 0.0004	UF of 300 due pup	HED reassess 03/30/89
EPA Chem Code: 122804	0 ppm	ty & lactation indices;	RFD: 0.0004	in critical study & mat-	EPA verified 04/20/89
CASWELL: 063AB	LEL: 0.4 mg/kg/day	decr pup body wt; incr	WHOADI: 0.0001	ernal developmental	WHO reviewed 1992
CFR: 180.449	0 ppm	dead pups at birth. No	QSTAR: 0	city in teratology stud-	RfD/PR reviewed
CFR185:		evidence of carcinogen.		ies. Mouse teratogen.	On IRIS.
REG_GROUP:	Cancer: E (RfD/PR				
Azaconazole (R 28644)			UF: 0	Chronic feed/carcino-	RfD/PR reviewed
CAS: 60207-31-0	NOEL: 0 mg/kg/day		OPPADI: 0	Chronic feeding- dog	Studies inadequate for
EPA Chem Code: 128882	0 ppm		RFD: 0	Reproduction- rat	RfD determination;
CASWELL: 321A	LEL: 0 mg/kg/day		WHOADI: 0	Developmental tox- rat	Studies inadeqaute for
CFR:	0 ppm		QSTAR: 0	Developmental tox-	oncogenic &
CFR185:					toxicity assessment.
REG_GROUP:	Newchemical Cancer:				
Azinphos-ethyl			UF:		WHO reviewed 1973;
CAS: 2642-71-9	NOEL: 0 mg/kg/day		OPPADI: 0		not established.
EPA Chem Code: 058002	0 ppm		RFD: 0		
CASWELL: 344	LEL: 0 mg/kg/day		WHOADI: 0		
CFR:	0 ppm		QSTAR: 0		
CFR185:					
REG_GROUP:	Cancer:				
Azinphos-methyl (Guthion)	1yr feeding- dog	Diarrhea in M;	ADI UF: 100	No data gaps.	HED reviewed 06/30/86
CAS: 86-50-0	NOEL: 0.15 mg/kg/day	te ChE inhibition in M&F.	OPPADI: 0.0015		EPA deferred 08/05/86
EPA Chem Code: 058001	5 ppm	Equivocal evidence of	RFD: 0		WHO reviewed 1991
CASWELL: 374	LEL: 0.69 mg/kg/day	carcinogenicity in rats	WHOADI: 0.005		RfD/PR reviewed
CFR: 180.154	25 ppm	(pancreas & adrenal	QSTAR: 0	Reg. Std. Sept, 1986.	
CFR185: 185.2225		ors); negative in mouse.			
REG GROUP:	LIST A (6B) Cancer: E (RfD/PR				

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CHEMICAL	STUDY TYPE		EFFECTS	REFERENCE DOSES		DATA GAPS/COMMENTS	STATUS
Azocyclotin (Tricyclotin)				UF:			WHO reviewed 1991
CAS: 41083-11-8	NOEL:	0 mg/kg/day		OPPADI:	0		
EPA Chem Code: 484600		0 ppm		RFD:	0		
CASWELL: 884AA	LEL:	0 mg/kg/day		WHOADI:	0.001		
CFR:		0 ppm		QSTAR:	0		
CFR185:							
REG_GROUP:	Cancer.						
BT (Bacillus thuringiensis)				UF:	0	Exempt from tolerances.	
CAS: 68038-71-1	NOEL:	0 mg/kg/day		OPPADI:	0		
EPA Chem Code: 006401		0 ppm		RFD:	0	Also see Caswell No.	
CASWELL: 066	LEL:	0 mg/kg/day		WHOADI:	0		
CFR: 180.1011		0 ppm		QSTAR:	0		
CFR185:							
REG_GROUP:	LIST A (6C)	Cancer.					
Barban				UF:	0		
CAS: 101-27-9	NOEL:	0 mg/kg/day		OPPADI:	0		
EPA Chem Code: 017601		0 ppm		RFD:	0		
CASWELL: 068	LEL:	0 mg/kg/day		WHOADI:	0		
CFR: 180.268		0 ppm		QSTAR:	0		
CFR185:							
REG_GROUP:	LIST B	Cancer.					
Bardac 22 (also 2250, 2280)	Develop tox- rat		Incr incidence of clinic-	ADI	UF: 100	No data gaps.	RfD/PR reviewed
CAS: 7173-51-5	NOEL:	1 mg/kg/day	al signs; decr body wt	OPPADI:	0.01	Rabbit Develop. Tox	
EPA Chem Code: 069149		0 ppm	gain; lowfood	RFD:	0	is co-critical: NOEL/LEL=	
CASWELL: 331A	LEL:	10 mg/kg/day		WHOADI:	0	1 and 10 mg/kg-day.	
CFR:		0 ppm	No evidence of	QSTAR:	0	[Syn. Didecyldimethyl	
CFR185:			enicity in rats or mice.			ammonium chloride]	
REG_GROUP:	LIST C Cancer.		E (RfD/PR				
Barium metaborate			No RfD established. If	UF:	0	No food use.	RfD/PR reviewed
CAS: 13701-59-2	NOEL:	0 mg/kg/day	Margin of Exposure is	OPPADI:	0		
EPA Chem Code: 011101		0 ppm	calculated the maternal	RFD:	0		
CASWELL: 071	LEL:	0 mg/kg/day	NOEL of 10 mg/kg-day	WHOADI:	0		
CFR:		0 ppm	the rabbit developmental	QSTAR:	0		
CFR185:			toxicity should be used.			[Syn. Busan 11-M1]	
REG GROUP:	LIST A (6A)	Cancer.					

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CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Baycor (Bitertanol) CAS: 55179-31-2 EPA Chem Code: 117801 CASWELL: CFR: 180.457 CFR185: REG_GROUP:	2yr/12mn NOEL: 0.625 mg/kg/day 25 ppm LEL: 1 mg/kg/day 40 ppm Cancer: Negative- 2	Liver and eye effects. (2Yr and 12-Mn dog ies were combined for this RfD). No evidence of enicity in rats or mice.	ADI UF: 100 OPPADI: 0.0063 RFD: 0 WHOADI: 0.01 QSTAR: 0	No data gaps.	WHO reviewed 1988 HED reviewed 03/10/89 HED reviewed 08/03/89 EPA deferred 10/19/89 OPP to reviewadrenal effect in dog study.
Baygon (Propoxur) CAS: 114-26-1 EPA Chem Code: 047802 CASWELL: 508 CFR: CFR185: REG_GROUP:	Human ChE study NOEL: 0 mg/kg/day 0 ppm LEL: 0.15 mg/kg/day 0 ppm LIST B Cancer: B2 (HED)	RBC ChE inhibition; At 0.36 mg/kg, single dose, RBC ChE inhibition & clinical signs were	ADI UF: 30 OPPADI: 0.005 RFD: 0.004 WHOADI: 0.02 QSTAR: 0.00369	No data gaps. Evidence of ity in rats (M&F bladder) & M mice (liver)	HED reviewed 09/12/86 EPA pending 12/09/86 EPA verified 02/18/87 WHO reviewed 1989 RfD/PR reviewed On IRIS.
Baythion (Phoxim/Volaton) CAS: 14816-18-3 EPA Chem Code: 598800 CASWELL: 902L CFR: CFR185: REG_GROUP:	NOEL: 0 mg/kg/day 0 ppm LEL: 0 mg/kg/day 0 ppm Cancer:		UF: 0 OPPADI: 0 RFD: 0 WHOADI: 0.001 QSTAR: 0		WHO reviewed 1984
Benazolin-ethyl CAS: 25059-80-7 EPA Chem Code: 126801 CASWELL: 202B CFR: CFR185: REG_GROUP:	NOEL: 0 mg/kg/day 0 ppm LEL: 0 mg/kg/day 0 ppm Cancer:		UF: 0 OPPADI: 0 RFD: 0 WHOADI: 0 QSTAR: 0	Carcinogenicity- mouse	HED reviewed 09/14/88. Returned to reviewer additional work.
Bendiocarb CAS: 22781-23-3 EPA Chem Code: 105201 CASWELL: 360B CFR: CFR185: 185.2150 REG GROUP:	2yr feeding- rat NOEL: 0.5 mg/kg/day 10 ppm LEL: 1 mg/kg/day 20 ppm LIST A (6C) Cancer: Negative- 2	Depression of blood opacity of lens (eye) in males. No evidence of enicity in rats or mice.	ADI UF: 100 OPPADI: 0.005 RFD: 0 WHOADI: 0.004 QSTAR: 0	No data gaps. No food uses.	WHO reviewed 1984 HED reviewed 03/03/87

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CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Benfluralin (Balan/Benefin) CAS: 1861-40-1 EPA Chem Code: 084301 CASWELL: 130 CFR: 180.208 CFR185: REG_GROUP:	Chronic feeding- NOEL: 25 mg/kg/day 0 ppm LEL: 125 mg/kg/day 0 ppm LIST B Cancer:	Increased relative liver weight, decreased Hct and Hb. (ORD used this study).	UF: 100 OPP ADI: 0.3 RFD: 0.3 WHO ADI: 0 QSTAR: 0	Critical study and data base not reviewed by RfD/PR Committee. OPP will used verified RfD value until this chemical is evaluated by OPP.	EPA verified 11/06/85 HED deferred 08/29/86 HED reviewed 12/05/88 Ad hoc meeting On IRIS.
Benoxacor CAS: 98730-04-2 EPA Chem Code: CASWELL: CFR: 180.460 CFR185: REG_GROUP:	90d feeding- dog NOEL: 5 mg/kg/day 0 ppm LEL: 0 mg/kg/day 0 ppm SafnerCancer.	90-Day rat study - mg/kg-day. NOELs taken form FR notice.	UF: 1000 OPP ADI: 0.005 RFD: 0 WHO ADI: 0 QSTAR: 0	Critical study and data base not reviewed by RfD/PR Committee.	Ad hoc meeting
Bensulfuron methyl (Londax) CAS: 83055-99-6 EPA Chem Code: 128820 CASWELL: 359H CFR: 180.445 CFR185: REG_GROUP:	1yr feeding- dog NOEL: 19.9 mg/kg/day 750 ppm LEL: 223 mg/kg/day 7500 ppm Newchemical Cancer: Negative- 2	Discoloration & inflamation of oral mucosa; elev. alkaline phosphatase, SGPT, & liver wts.; pigment in biliary canaliculi.	ADI UF: 100 OPP ADI: 0.2 RFD: 0.2 WHO ADI: 0 QSTAR: 0	No data gaps. No evidence of carcinogenicity in rats or mice. [Syn. DPX-F5384]	HED reviewed 08/03/86 EPA verified 09/02/86 HED reassess 04/07/88 EPA verified 05/25/88 On IRIS.
Bensulide (Betasan) CAS: 741-58-2 EPA Chem Code: 009801 CASWELL: 357 CFR: 180.241 CFR185: REG_GROUP:	90d feeding- dog NOEL: 0 mg/kg/day 0 ppm LEL: 2 mg/kg/day 0 ppm LIST B Cancer:		UF: 300 OPP ADI: 0.0066 RFD: 0 WHO ADI: 0 QSTAR: 0	Critical study and data base not reviewed by RfD/PR Committee.	
Bentazon (Basagran) CAS: 25057-89-0 EPA Chem Code: 275200 CASWELL: 509C CFR: 180.355 CFR185: REG GROUP:	1yr feeding- dog NOEL: 3.2 mg/kg/day 100 ppm LEL: 13.1 mg/kg/day 400 ppm LIST A (6B) Cancer: E (RfD/PR	Blood effects & bloody feces. No evidence of enicity in rats or mice.	ADI UF: 100 OPP ADI: 0.03 RFD: 0.03 WHO ADI: 0.1 QSTAR: 0	No data gaps.	RfD/PR reviewed EPA deferred 03/27/91 WHO reviewed 1991 RfD/PR reviewed EPA verified 12/08/94 On IRIS.

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CHEMICAL	STUDY TYPE		EFFECTS	REFERENCE DOSES		DATA GAPS/COMMENTS	STATUS
Benzadox				UF:	0		
CAS: 5251-93-4	NOEL:	0 mg/kg/day		OPPADI:	0		
EPA Chem Code: 275400		0 ppm		RFD:	0		
CASWELL: 075C	LEL:	0 mg/kg/day		WHOADI:	0		
CFR: 180.270		0 ppm		QSTAR:	0		
CFR185:							
REG_GROUP:	Cancer.						
Benzene hexachloride				UF:	0		WHO reviewed 1973;
CAS: 608-73-1	NOEL:	0 mg/kg/day		OPPADI:	0		not established.
EPA Chem Code: 008901		0 ppm		RFD:	0		
CASWELL: 079	LEL:	0 mg/kg/day		WHOADI:	0		
CFR: 180.140		0 ppm		QSTAR:	0		
CFR185:							
REG_GROUP:	Cancer.						
Benzoic acid	Human Exposure		No toxic effects were	UF:	1	Critical study and data	EPA verified 09/17/87
CAS: 65-85-0	NOEL:	312 mg/kg/day	observed.	OPPADI:	0	base not reviewed by	
EPA Chem Code: 009101		0 ppm		RFD:	4	RfD/PR Committee.	
CASWELL: 081	LEL:	0 mg/kg/day	312 mg/day/70 kg man =	WHOADI:	0		
CFR:		0 ppm	mg/kg/day	QSTAR:	0		
CFR185:							On IRIS.
REG_GROUP:	LIST D Cancer.		D (CRAVE)				
Benzyladenine				UF:	0		
CAS: 1214-39-7	NOEL:	0 mg/kg/day		OPPADI:	0		
EPA Chem Code: 116901		0 ppm		RFD:	0		
CASWELL: 081EE	LEL:	0 mg/kg/day		WHOADI:	0		
CFR: 180.376		0 ppm		QSTAR:	0		
CFR185:							
REG_GROUP:	LIST B	Cancer.					
Bifenox	Chronic feeding-			PADI UF:	100	Critical study and data	RFD NOT VERIFIED BY
CAS: 42576-02-3	NOEL:	15 mg/kg/day		OPPADI:	0.15	base not reviewed by	AGENCY COMMITTEES.
EPA Chem Code: 104301		600 ppm		RFD:	0	RfD/PR Committee.	
CASWELL: 561AA	LEL:	0 mg/kg/day		WHOADI:	0		
CFR: 180.351		0 ppm		QSTAR:	0		
CFR185:							
REG GROUP:	LIST A -	Cancer.					

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CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Bifenthrin (Talstar) CAS: 82657-04-3 EPA Chem Code: 128825 CASWELL: 463F CFR: 180.442 CFR185: REG_GROUP:	1yr feeding-dog NOEL: 1.5 mg/kg/day 0 ppm LEL: 3 mg/kg/day 0 ppm Cancer: C (HED)	Tremors. Evidence of ity in mice (bladder, M); negative in rats.	ADI UF: 100 OPPADI: 0.015 RFD: 0.015 WHOADI: 0.02 QSTAR: 0	No data gaps.	HED reviewed 11/06/87 EPA deferred 02/25/88 EPA deferred 05/25/88 EPA verified 07/20/88 WHO reviewed 1992 On IRIS.
Binapacryl CAS: 485-31-4 EPA Chem Code: 012201 CASWELL: 086 CFR: CFR185: REG_GROUP:	NOEL: 0 mg/kg/day 0 ppm LEL: 0 mg/kg/day 0 ppm Cancer:		UF: OPPADI: 0 RFD: 0 WHOADI: 0 QSTAR: 0		WHO reviewed 1985; not established.
Bioallethrin CAS: 28057-48-9 EPA Chem Code: 004003 CASWELL: 025A CFR: 180.113 CFR185: REG_GROUP:	6mo feeding-dog NOEL: 5 mg/kg/day 200 ppm LEL: 25 mg/kg/day 1000 ppm LIST A Cancer: Undetermined.	Degeneration of hepatocytes, alteration of clinical chemistries. No carcinogenicity data available.	PADI UF: 1000 OPPADI: 0.005 RFD: 0 WHOADI: 0 QSTAR: 0	Developmental tox-rat Chronic feeding-rat Chronic feeding-dog Reproduction-rat Extra UF of 10 for data gaps.	HED reviewed 04/03/87
Bioresmethrin CAS: 28434-01-7 EPA Chem Code: 097802 CASWELL: CFR: CFR185: REG_GROUP:	NOEL: 0 mg/kg/day 0 ppm LEL: 0 mg/kg/day 0 ppm LIST A Cancer:		UF: OPPADI: 0 RFD: 0 WHOADI: 0.03 QSTAR: 0		WHO reviewed 1976 WHO reviewed 1991
Biphenyl,1,1-(Diphenyl) CAS: 92-52-4 EPA Chem Code: 017002 CASWELL: 087 CFR: 180.141 CFR185: REG GROUP:	Chronic feeding- NOEL: 50 mg/kg/day 0 ppm LEL: 250 mg/kg/day 0 ppm LIST B Cancer: D (CRAVE)	Kidney damage.	PLD UF: 1000 OPPADI: 0 RFD: 0.05 WHOADI: 0.125 QSTAR: 0	Critical study and data base not reviewed by RfD/PR Committee.	WHO reviewed 1967 EPA verified 10/09/85 On IRIS.

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CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Bis(trichlormethyl) sulfone CAS: 3064-70-8 EPA Chem Code: 035601 CASWELL: 104 CFR: CFR185: REG_GROUP:	NOEL: 0 mg/kg/day 0 ppm LEL: 0 mg/kg/day 0 ppm List B Cancer.	Since this chemical is not intended for food uses & since chronic or life time exposure is an unlikely scenario, an was not established.	UF: OPPADI: 0 RFD: 0 WHOADI: 0 QSTAR: 0	[Syn. N-1386]	RfD/PR reviewed
Borax CAS: 1303-96-4 EPA Chem Code: 011102 CASWELL: 108 CFR: 180.271 CFR185: REG_GROUP:	2yr feeding- dog NOEL: 8.8 mg/kg/day 350 ppm LEL: 29 mg/kg/day 1170 ppm LIST A Cancer. E (RfD/PR	Testicular atrophy, spermatogenic arrest. No evidence of icity in rats or mice.	UF: 100 OPPADI: 0.09 RFD: 0.09 WHOADI: 0 QSTAR: 0	Data for this chemical & Boric acid will be used together to develop an RfD.	EPA verified 06/23/88 EPA verified 07/20/89 RfD/PR reviewed RfD/PR reviewed
Boric acid CAS: 10043-35-3 EPA Chem Code: 011001 CASWELL: 109 CFR: 180.271 CFR185: REG_GROUP:	2yr feeding- dog NOEL: 8.8 mg/kg/day 350 ppm LEL: 29 mg/kg/day 1170 ppm LIST A (6A) Cancer. E (RfD/PR	Testicular atrophy, spermatogenic arrest No evidence of icity in rats or mice.	UF: 100 OPPADI: 0.09 RFD: 0 WHOADI: 0 QSTAR: 0	Data for this chemical & Borax will be used together to establish an RfD.	EPA verified 06/23/88 EPA verified 07/20/89 AD Hoc Meeting RfD/PR reviewed RfD/PR reviewed
Boron CAS: 7440-42-8 EPA Chem Code: 128945 CASWELL: CFR: CFR185: REG_GROUP:	2yr feeding- dog NOEL: 8.8 mg/kg/day 350 ppm LEL: 29 mg/kg/day 1170 ppm Cancer. E (RfD/PR	Testicular atrophy, spermatogenic arrest.	UF: 100 OPPADI: 0.09 RFD: 0.09 WHOADI: 0 QSTAR: 0	Data for this chemical & Boric acid will be used together to develop an RfD.	EPA verified 06/23/88 EPA verified 07/20/89 EPA deferred 06/15/93 EPA deferred 08/03/94
Brodifacoum CAS: 56073-10-0 EPA Chem Code: 112701 CASWELL: 114AAA CFR: CFR185: REG GROUP:	NOEL: mg/kg/day ppm LEL: mg/kg/day ppm Cancer.		UF: OPPADI: RFD: WHOADI: QSTAR:	Since this chemical is not intended for food uses & since chronic or life time exposure is an unlikely scenario, an was not established.	RfD/PR reviewed

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CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Bromacil (+lithium salt)	2yr feeding- rat	Decr body wt gains	ADI UF: 100	No data gaps.	HED reviewed 02/21/86
CAS: 314-40-9	NOEL: 9.82 mg/kg/day	in males and females.	OPPADI: 0.1		EPA reviewed 12/16/86
EPA Chem Code: 012301	250 ppm		RFD: 0		RfD/PR reviewed
CASWELL: 111	LEL: 103 mg/kg/day		WHOADI: 0		
CFR: 180.210	2500 ppm	Referred to HED	QSTAR: 0		
CFR185:		enicity Peer Review			
REG_GROUP:	LIST A (6A) Cancer: C (HCPRC)				
Bromadiolone			UF:	Since this chemical is	RfD/PR reviewed
CAS: 28772-56-7	NOEL: 0 mg/kg/day		OPPADI: 0	not intended for food	
EPA Chem Code: 112001	0 ppm		RFD: 0	uses & since chronic or	
CASWELL: 486AB	LEL: 0 mg/kg/day		WHOADI: 0	life time exposure is an	
CFR:	0 ppm		QSTAR: 0	unlikely scenario, an	
CFR185:				was not established.	
REG_GROUP:	LIST B Cancer:				
Bromethalin			UF:	Non-food use chemical.	RfD/PR reviewed
CAS: 63333-35-7	NOEL: 0 mg/kg/day		OPPADI: 0	Inadequate data for RfD	
EPA Chem Code: 112802	0 ppm		RFD: 0	derivation.	
CASWELL: 561BB	LEL: 0 mg/kg/day		WHOADI: 0		
CFR:	0 ppm		QSTAR: 0		
CFR185:					
REG_GROUP:	LIST B Cancer:				
Bromomethane	13wk feeding- rat	Epithelail hyperplasia of	PLD UF: 1000	Chronic feed/carcino-	WHO reviewed 1988 as
CAS: 74-83-9	NOEL: 1.4 mg/kg/day	the fore stomach.	OPPADI: 0.0014	Chronic feeding- dog	Bromide ion.
EPA Chem Code: 053201	0 ppm		RFD: 0.0014	Reproduction- rat	EPA verified 05/26/88
CASWELL: 555	LEL: 7.1 mg/kg/day		WHOADI: 1	Developmental tox-	HED concurs 05/26/88
CFR: 180.123	0 ppm	No carcinogenicity data	QSTAR: 0	Subchronic inhalation	RfD/PR reviewed
CFR185: 185.3475		available.		[Syn. Methyl bromide)	On IRIS.
REG_GROUP:	LIST A (6B) Cancer: D (CRAVE)				
Bromophos			UF: 0		WHO reviewed 1977
CAS: 2104-96-3	NOEL: 0 mg/kg/day		OPPADI: 0		
EPA Chem Code: 008706	0 ppm		RFD: 0		
CASWELL: 114E	LEL: 0 mg/kg/day		WHOADI: 0.04		
CFR:	0 ppm		QSTAR: 0		
CFR185:					
REG GROUP:	Cancer:				

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CHEMICAL	STUDY TYPE		EFFECTS	REFERENCE DOSES		DATA GAPS/COMMENTS	STATUS
Bromophos-ethyl				UF:	0		WHO reviewed 1975
CAS: 4824-78-6	NOEL:	0 mg/kg/day		OPPADI:	0		
EPA Chem Code: 214500		0 ppm		RFD:	0		
CASWELL: 114D	LEL:	0 mg/kg/day		WHOADI:	0.003		
CFR:		0 ppm		QSTAR:	0		
CFR185:							
REG_GROUP:	Cancer.						
Bromopropylate				UF:	0		WHO reviewed 1993
CAS: 18181-80-1	NOEL:	0 mg/kg/day		OPPADI:	0		
EPA Chem Code: 028802		0 ppm		RFD:	0		
CASWELL: 511A	LEL:	0 mg/kg/day		WHOADI:	0.03		
CFR:		0 ppm		QSTAR:	0		
CFR185:							
REG_GROUP:	Cancer.						
Bromoxynil (+ salts)	1yr feeding- dog		Body wt changes; Incr	ADI UF:	100	No data gaps.	EPA pending 05/31/85
CAS: 1689-84-5	NOEL:	1.5 mg/kg/day	salivation, panting, liq-	OPPADI:	0.015		HED reviewed 06/12/87
EPA Chem Code: 035301		0 ppm	uid feces & pale gums.	RFD:	0.02	1.5 mg/kg dose	EPA pending 08/05/86
CASWELL: 119	LEL:	7.5 mg/kg/day	Decr RBC, Hb & PCV;	WHOADI:	0	a threshold NOEL/LEL.	EPA verified 09/16/87
CFR: 180.324		0 ppm	urea & absolute & relat-	QSTAR:	0.103	Evidence of	RfD/PR reviewed
CFR185:			ive liver weights.			ity in mice (liver).	On IRIS.
REG_GROUP:	LIST B Cancer.		C (HED); D (SAP)				
Bromoxynil octanoate	2yr feeding- rat		No effects observed at	UF:	300		EPA pending 11/06/85
CAS: 1689-99-2	NOEL:	7.3 mg/kg/day	the HDT (study used	OPPADI:	0.02		HED reviewed 06/12/87
EPA Chem Code: 035302		100 ppm	bromoxynil).	RFD:	0.02		EPA verified 09/16/87
CASWELL: 119A	LEL:	0 mg/kg/day		WHOADI:	0		
CFR:		0 ppm		QSTAR:	0		
CFR185:							On IRIS.
REG_GROUP:	LIST B	Cancer.					
Bromuconazole	2yr feeding- rat		Liver toxicity; increased	ADI UF:	100	No data gaps.	RfD/PR reviewed
CAS: 116255-48-2	NOEL:	0.88 mg/kg/day	liver non-neoplastic	OPPADI:	0.009		RfD/PR reviewed
EPA Chem Code: 120503		20 ppm	lesions in females.	RFD:	0		
CASWELL:	LEL:	6.48 mg/kg/day		WHOADI:	0		
CFR:		150 ppm	No evidence of	QSTAR:	0		
CFR185:			enicity in rats or mice.				
REG GROUP:	Newchemical	Cancer.	E (RfD/PR				

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CHEMICAL	STUDY TYPE		EFFECTS	REFERENCE DOSES		DATA GAPS/COMMENTS	STATUS
Bronopol	2yr feeding- rat		Lower food intake;	PADI UF:	100	Chronic feeding- dog	RfD/PR reviewed
CAS: 52-51-7	NOEL:	10.5 mg/kg/day	ed wt gain (M);	OPPADI:	0.1	Additional UF of 3 was	
EPA Chem Code: 216400		0 ppm	metaplasia, inflammation	RFD:	0	not considered	
CASWELL: 116A	LEL:	0 mg/kg/day	or atrophic acini in the	WHOADI:	0	since the rat appears to	
CFR:		40.2 ppm	salivary glands (M & F).	QSTAR:	0	be more sensitive than	
CFR185:						dog based on 90-day	
REG_GROUP:	LIST B Cancer.	E (RfD/PR					
Bufencarb (RE-5353)				UF:	0	All tolerances revoked	
CAS: 2282-34-0	NOEL:	0 mg/kg/day		OPPADI:	0	1993.	
EPA Chem Code: 059302		0 ppm		RFD:	0		
CASWELL: 454C	LEL:	0 mg/kg/day		WHOADI:	0		
CFR: 180.255		0 ppm		QSTAR:	0		
CFR185:							
REG_GROUP:	Cancer.						
Buprofezin (Applaud)				UF:			WHO reviewed 1991
CAS: 69327-76-0	NOEL:	0 mg/kg/day		OPPADI:	0		
EPA Chem Code: 275100		0 ppm		RFD:	0		
CASWELL:	LEL:	0 mg/kg/day		WHOADI:	0.01		
CFR:		0 ppm		QSTAR:	0		
CFR185:							
REG_GROUP:	Cancer.						
Busan 1104				UF:		Since this chemical is	RfD/PR reviewed
CAS: 85264-33-1	NOEL:	0 mg/kg/day		OPPADI:	0	not intended for food	
EPA Chem Code: 129074		0 ppm		RFD:	0	uses & since chronic or	
CASWELL:	LEL:	0 mg/kg/day		WHOADI:	0	life time exposure is an	
CFR:		0 ppm		QSTAR:	0	unlikely scenario, an	
CFR185:						was not established.	
REG_GROUP:	Newchemical	Cancer.					
Busan 74 (HPMTS)				UF:		Since this chemical is	RfD/PR reviewed
CAS: 29803-57-4	NOEL:	0 mg/kg/day		OPPADI:	0	not intended for food	
EPA Chem Code: 035604		0 ppm		RFD:	0	uses & since chronic or	
CASWELL: 495A	LEL:	0 mg/kg/day		WHOADI:	0	life time exposure is an	
CFR:		0 ppm		QSTAR:	0	unlikely scenario, an	
CFR185:						was not established.	
REG GROUP:	LIST C	Cancer.					

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CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Busan 77 CAS: 31512-74-0 EPA Chem Code: 069183 CASWELL: 678A CFR: CFR185: REG_GROUP:	Develop tox- rabbit NOEL: 45 mg/kg/day 0 ppm LEL: 125 mg/kg/day 0 ppm List C Cancer.	Incr incidence of abortions, clinical signs; reduced feed consumption body weight gain. Incr incidence of 13th rudimentary rib Referred to HED enicity Peer Review	ADI UF: 100 OPPADI: 0.45 RFD: 0 WHOADI: 0 QSTAR: 0	No data gaps. Referred to HED enicity Peer Review	RfD/PR reviewed
Butachlor CAS: 23184-66-9 EPA Chem Code: 112301 CASWELL: 119B CFR: CFR185: REG_GROUP:	2yr feeding - rat NOEL: 3.65 mg/kg/day 100 ppm LEL: 37.1 mg/kg/day 1000 ppm Newchemical Cancer.	Decr body wt gain; ations in clinical chemistry, urinalysis, organ wts; lesions in eyes (F) Referred to HED enicity Peer Review Referred to HCPRC	PADI UF: 100 OPPADI: 0.037 RFD: 0 WHOADI: 0 QSTAR: 0	Reproduction - rat maybe upgraded)	RfD/PR reviewed
Butonate CAS: 126-22-7 EPA Chem Code: 035701 CASWELL: 385A CFR: CFR185: REG_GROUP:	NOEL: 0 mg/kg/day 0 ppm LEL: 0 mg/kg/day 0 ppm Cancer.		UF: 0 OPPADI: 0 RFD: 0 WHOADI: 0 QSTAR: 0		
Butoxycarboxim CAS: 34681-23-7 EPA Chem Code: 113001 CASWELL: 120A CFR: CFR185: REG_GROUP:	NOEL: 0 mg/kg/day 0 ppm LEL: 0 mg/kg/day 0 ppm List A Cancer.		UF: OPPADI: 0 RFD: 0 WHOADI: 0 QSTAR: 0	[Syn. Butocarboxim]	WHO reviewed 1985; not established.
Butralin CAS: 33629-47-9 EPA Chem Code: 106501 CASWELL: 125E CFR: 180.358 CFR185: REG GROUP:	NOEL: 0 mg/kg/day 0 ppm LEL: 0 mg/kg/day 0 ppm LIST B Cancer.		UF: 0 OPPADI: 0 RFD: 0 WHOADI: 0 QSTAR: 0	Since this chemical is not intended for food uses & since chronic or life time exposure is an unlikely scenario, an was not established.	RfD/PR reviewed

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CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Butylate (Sutan) CAS: 2008-41-5 EPA Chem Code: 041405 CASWELL: 434A CFR: 180.232 CFR185: REG_GROUP:	1yr feeding- dog NOEL: 5 mg/kg/day 0 ppm LEL: 25 mg/kg/day 0 ppm LIST A (4 Cancer: E (RfD/PR	Increased relative liver weights in males.	ADI UF: 100 OPPADI: 0.05 RFD: 0.05 WHOADI: 0 QSTAR: 0	No data gaps.	EPA verified 05/25/88 HED reassess 12/05/88 EPA verified 01/18/89 RfD/PR reviewed EPA verified 12/14/93 On IRIS.
Butylphthalyl Butylglycolate CAS: 85-70-1 EPA Chem Code: CASWELL: 131B CFR: CFR185: REG_GROUP:	2yr feeding- rat NOEL: 1000 mg/kg/day 20000 ppm LEL: 0 mg/kg/day 0 ppm Cancer:	No adverse effects.	UF: 1000 OPPADI: 0 RFD: 1 WHOADI: 0 QSTAR: 0	Critical study and data base not reviewed by RfD/PR Committee.	EPA verified 01/22/86 On IRIS.
Cacodylic acid (+ salt) CAS: 75-60-5 EPA Chem Code: 012501 CASWELL: 133 CFR: 180.311 CFR185: REG_GROUP:	90d feeding- dog NOEL: 0.75 mg/kg/day 0 ppm LEL: 0 mg/kg/day 0 ppm LIST B Cancer: B2 (HCPRC)		PADI UF: 1000 OPPADI: 0.00075 RFD: 0.01 WHOADI: 0 QSTAR: 0.0623	Critical study & data base not reviewed by RFD/PR Committee.	Pending HED review. EPA complete 05/14/86, however generic issue choice of effect level to be resolved between and OPP.
Calcium arsenate CAS: 7778-44-1 EPA Chem Code: 013501 CASWELL: 137 CFR: 180.192 CFR185: REG_GROUP:	Chronic feeding- NOEL: 0.42 mg/kg/day 0 ppm LEL: 0 mg/kg/day 0 ppm LIST B Cancer:	NOEL for all arsenates.	PADI UF: 100 OPPADI: 0.0042 RFD: 0 WHOADI: 0 QSTAR: 0	All tolerances have revoked. Critical study and data gaps not reviewed by RfD/PR Committee.	WHO reviewed 1968; not established.
Calcium cyanide CAS: 592-01-8 EPA Chem Code: 074001 CASWELL: 142 CFR: 180.125 CFR185: REG GROUP:	2yr feeding- rat NOEL: 19.1 mg/kg/day 0 ppm LEL: 53 mg/kg/day 0 ppm LIST C Cancer: C(q) (HCPRC)	Weight loss, thyroid effects and myelin eration.	UF: 500 OPPADI: 0 RFD: 0.04 WHOADI: 0 QSTAR: 0.0674	Critical study and data base not reviewed by RfD/PR Committee.	EPA verified 08/05/85 On IRIS.

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CHEMICAL	STUDY TYPE			EFFECTS	REFERENCE DOSES		DATA GAPS/COMMENTS	STATUS
Captafol	1yr feeding- dog			Degeneration,	PADI UF:	1000	Doses given by	WHO TADI withdrawn
CAS: 2939-80-2	NOEL:	0	mg/kg/day	tion of renal pelvis and	OPPADI:	0.002	NOEL not established.	HED reviewed 03/31/86
EPA Chem Code: 081701		0	ppm	bladder- NOEL not	RFD:	0.002	Extra UF of 10 used due	EPA verified 04/22/86
CASWELL: 828	LEL:	2	mg/kg/day	Evidence of	WHOADI:	0	to lack of a NOEL in the	HED reviewed 01/17/87
CFR: 180.267		0	ppm	ity- rats (liver, kidney)	QSTAR:	0.051	critical study.	EPA verified 05/20/87
CFR185:				& mice			TOX WOTE 2/04/87.	On IRIS.
REG_GROUP:	LIST A - Cancer.			B2 (HED)				
Captan	3gen reprod- rat			Decreased pup body	ADI UF:	100	No data gaps.	EPA verified 03/26/86
CAS: 133-06-2	NOEL:	12.5	mg/kg/day	RfD based on results of	OPPADI:	0.13		HED reviewed 12/22/88
EPA Chem Code: 081301		250	ppm	1-gen. and 3-gen.	RFD:	0.13		EPA verified 01/18/89
CASWELL: 159	LEL:	25	mg/kg/day	duction studies.	WHOADI:	0.1		WHO reviewed 1990
CFR: 180.103		500	ppm	Evidence of	QSTAR:	0.00121		RfD/PR reviewed
CFR185: 185.500				ity in rats and mice.				On IRIS.
REG_GROUP:	LIST A (3 SR)	Cancer.		B2 (HED/SAP)				
Carbaryl	1yr feeding- dog			Decreased plasma &	ADI UF:	100	No data gaps.	WHO reviewed 1973
CAS: 63-25-2	NOEL:	1.43	mg/kg/day	ChE.	OPPADI:	0.014		EPA verified 05/31/85
EPA Chem Code: 056801		45	ppm		RFD:	0.1		RfD/PR reviewed
CASWELL: 160	LEL:	3.37	mg/kg/day		WHOADI:	0.01		
CFR: 180.169		125	ppm		QSTAR:	0.0227		
CFR185:								On IRIS.
REG_GROUP:	LIST A (5	Cancer.		C(q) (HCPRC)				
Carbendazim					UF:			WHO reviewed 1985
CAS: 10605-21-7	NOEL:	0	mg/kg/day		OPPADI:	0		
EPA Chem Code: 128872		0	ppm		RFD:	0		
CASWELL: 079C	LEL:	0	mg/kg/day		WHOADI:	0.01		
CFR:		0	ppm		QSTAR:	0		
CFR185:								
REG_GROUP:	Cancer.							
Carbofuran	1yr feeding- dog			Decreased plasma &	ADI UF:	100	No data gaps.	WHO reviewed 1982
CAS: 1563-66-2	NOEL:	0.5	mg/kg/day	ChE; aspermia, uterine	OPPADI:	0.005		HED reviewed 02/21/86
EPA Chem Code: 090601		0	ppm	hyperplasia,	RFD:	0.005		HED reviewed 03/06/87
CASWELL: 160A	LEL:	12.5	mg/kg/day		WHOADI:	0.01	RfD agress with Barton	EPA verified 03/18/87
CFR: 180.254		0	ppm	No evidence of	QSTAR:	0	memo of 1/85.	
CFR185: 185.600				enicity in rats or mice.				On IRIS.
REG GROUP:	LIST A	Cancer.		Negative- 2				

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CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Carbon dioxide CAS: 124-38-9 EPA Chem Code: 016601 CASWELL: 163 CFR: CFR185: 185.650 REG_GROUP:	NOEL: 0 mg/kg/day 0 ppm LEL: 0 mg/kg/day 0 ppm LIST D Cancer.		UF: OPPADI: 0 RFD: 0 WHOADI: 0 QSTAR: 0		
Carbon disulfide CAS: 75-15-0 EPA Chem Code: 016401 CASWELL: 162 CFR: 180.467 CFR185: REG_GROUP:	Inhal Develop- rat NOEL: 11 mg/kg/day 20 ppm LEL: 0 mg/kg/day 0 ppm Cancer: Undetermined.	Fetal toxicity/malformations.	UF: 100 OPPADI: 0 RFD: 0.1 WHOADI: 0 QSTAR: 0	Critical study and data base not reviewed by RfD/PR Committee.	WHO reviewed 1965; not established. EPA verified 08/05/85 On IRIS.
Carbon tetrachloride CAS: 56-23-5 EPA Chem Code: 016501 CASWELL: 164 CFR: 180.1005 CFR185: REG_GROUP:	12wk feeding- rat NOEL: 0.71 mg/kg/day 0 ppm LEL: 7.1 mg/kg/day 0 ppm Cancer: B2 (CRAVE)	Liver lesions.	UF: 100 OPPADI: 0 RFD: 0.0007 WHOADI: 0 QSTAR: 0.13	Critical study and data base not reviewed by RfD/PR Committee.	WHO reviewed 1965; not established. EPA verified 05/20/85 On IRIS.
Carbophenothion CAS: 786-19-6 EPA Chem Code: 058102 CASWELL: 165 CFR: 180.156 CFR185: 185.700 REG_GROUP:	2yr feeding- dog NOEL: 0 mg/kg/day 0 ppm LEL: 0.125 mg/kg/day 5 ppm LIST A - Cancer. Negative- 1	Decreased plasma & ChE; NOEL not No evidence of enicity in rats.	PADI UF: 1000 OPPADI: 0.00013 RFD: 0 WHOADI: 0.0005 QSTAR: 0	Chronic feeding- rat Developmental tox- 2 UF of 100 used for brain ChE inhibition, extra UF of 10 used for lack of NOEL in critical study.	WHO reviewed 1980 HED reviewed 10/10/86 HED reviewed 04/03/87
Carbosulfan (FMC 35001) CAS: 55285-14-8 EPA Chem Code: 090602 CASWELL: 463C CFR: CFR185: REG GROUP:	2yr feeding- rat NOEL: 1 mg/kg/day 20 ppm LEL: 25 mg/kg/day 500 ppm Cancer: Negative- 2	Decreased body No evidence of enicity in rats or mice.	ADI UF: 100 OPPADI: 0.01 RFD: 0.01 WHOADI: 0.01 QSTAR: 0	No data gaps. 6 month dog study accepted for chronic feeding requirement.	HED reviewed 04/25/86 EPA verified 06/10/86 WHO reviewed 1986 On IRIS.

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CHEMICAL	STUDY TYPE			EFFECTS	REFERENCE DOSES			DATA GAPS/COMMENTS	STATUS
Carboxin	2yr feeding-rat			Decreased weight gain,	ADI	UF:	100	No data gaps, however	HED reviewed 03/07/86
CAS: 5234-68-4	NOEL:	10	mg/kg/day	increased mortality, de-	OPPADI:		0.1	chronic rat and dog	EPA verified 03/26/86
EPA Chem Code: 090201		200	ppm	creased spleen, heart	RFD:		0.1	studies are not core-	
CASWELL: 165A	LEL:	30	mg/kg/day	kidney weights.	WHOADI:		0	graded.	
CFR: 180.301		600	ppm	No evidence of	QSTAR:		0		
CFR185:				enicity in rats or mice.					On IRIS.
REG_GROUP:	LIST A (6A) Cancer: Negative- 2								
Cartap						UF:			WHO reviewed 1978
CAS: 15263-53-3	NOEL:	0	mg/kg/day		OPPADI:		0		
EPA Chem Code:		0	ppm		RFD:		0		
CASWELL:	LEL:	0	mg/kg/day		WHOADI:		0.1		
CFR:		0	ppm		QSTAR:		0		
CFR185:									
REG_GROUP:	Cancer:								
Chloramben (acid+salts)	18mo feeding-			Enlargement and	PADI	UF:	1000	Developmental tox-	HED reviewed 05/8/86
CAS: 133-90-4	NOEL:	0	mg/kg/day	tion of hepatocytes;	OPPADI:		0.015	Extra UF of 10 used	EPA verified 06/24/86
EPA Chem Code: 029901		0	ppm	not established.	RFD:		0.015	RfD is based on LEL.	
CASWELL: 168A	LEL:	15	mg/kg/day	Evidence of	WHOADI:		0		
CFR: 180.266		100	ppm	ity-F mice (liver, NCI);	QSTAR:		0		
CFR185:				negative in rat.					On IRIS.
REG_GROUP:	LIST A - Cancer. Deferred								
Chlorbenside (Mitox)						UF:	0		WHO reviewed 1965
CAS: 103-17-3	NOEL:	0	mg/kg/day		OPPADI:		0		
EPA Chem Code: 017401		0	ppm		RFD:		0		
CASWELL: 173	LEL:	0	mg/kg/day		WHOADI:		0.01		
CFR: 180.168		0	ppm		QSTAR:		0		
CFR185:									
REG_GROUP:	Cancer.								
Chlorbromuron (Maloran)						UF:	0		
CAS: 13360-45-7	NOEL:	0	mg/kg/day		OPPADI:		0		
EPA Chem Code: 090701		0	ppm		RFD:		0		
CASWELL: 173A	LEL:	0	mg/kg/day		WHOADI:		0		
CFR: 180.279		0	ppm		QSTAR:		0		
CFR185:									
REG GROUP:	Cancer.								

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CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Chlordane	30mn feeding-rat	Regional liver hypertro-	PLD UF: 1000	No food uses.	EPA verified 12/18/85
CAS: 57-74-9	NOEL: 0.055 mg/kg/day	phy in females; Male	OPPADI: 0.00006	Chronic feeding-dog	HED complete 08/08/86
EPA Chem Code: 058201	1 ppm	=25 ppm (1.175	RFD: 0.00006	Reproduction-rat	WHO reviewed 1986
CASWELL: 174	LEL: 0.223 mg/kg/day	HDT.	WHOADI: 0.0005	Developmental tox-rat	HED complete 03/10/89
CFR: 180.122	5 ppm	Carcinogenicity issues	QSTAR: 1.3	Developmental tox	EPA verified 03/22/89
CFR185:		still under review.			On IRIS.
REG_GROUP:	LIST A - Cancer. B2 (CRAVE)				
Chlordimeform	2yr feeding-rat	RfD from the	PADI UF: 100	All tolerances have	WHO reviewed 1987;
CAS: 6164-98-3	NOEL: 0.1 mg/kg/day	Standard.	OPPADI: 0.001	revoked.	withdrawn.
EPA Chem Code: 059701	2 ppm		RFD: 0	Critical study and data	
CASWELL: 174A	LEL: 0 mg/kg/day		WHOADI: 0	gaps not reviewed by	
CFR: 180.285	0 ppm		QSTAR: 1.3	RfD/PR Committee.	
CFR185:					
REG_GROUP:	LIST A - Cancer. B2 (HED)				
Chlorethoxyfos (Fortress)	Feeding studies-	Plasma ChE inhibition (2-	ADI UF: 100	No data gaps.	RfD/PR reviewed
CAS: 54593-83-8	NOEL: 0.061 mg/kg/day	yr study at 2 ppm);	OPPADI: 0.0006		
EPA Chem Code: 129006	2 ppm	& plasma ChE inhibition	RFD: 0		
CASWELL:	LEL: 0.186 mg/kg/day	(90-day study at 5	WHOADI: 0		
CFR:	5 ppm	NOEL/LEL derived from	QSTAR: 0		
CFR185:		2-yr & 90-day studies.		[Syn. Chlorethoxyphos]	
REG_GROUP:	Newchemical Cancer. Under review.				
Chlorfenac (+ salts)			UF: 0		
CAS: 85-34-7	NOEL: 0 mg/kg/day		OPPADI: 0		
EPA Chem Code: 082601	0 ppm		RFD: 0		
CASWELL: 882,A-	LEL: 0 mg/kg/day		WHOADI: 0		
CFR: 180.283	0 ppm		QSTAR: 0		
CFR185:					
REG_GROUP:	LIST D Cancer.				
Chlorfenvinphos			UF: 0		WHO reviewed 1971
CAS: 470-90-6	NOEL: 0 mg/kg/day		OPPADI: 0		
EPA Chem Code: 084101	0 ppm		RFD: 0		
CASWELL: 187	LEL: 0 mg/kg/day		WHOADI: 0.002		
CFR: 180.322	0 ppm		QSTAR: 0		
CFR185:					
REG GROUP:	LIST B Cancer.				

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CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Chlorimuron-ethyl (Classic) CAS: 90982-32-4 EPA Chem Code: 128901 CASWELL: 193B CFR: 180.429 CFR185: REG_GROUP:	1yr feeding- dog NOEL: 6.25 mg/kg/day 250 ppm LEL: 37.5 mg/kg/day 1500 ppm Cancer: Negative - 1	Incr in WBC, dcer in in F, incr in alkaline phosphatase in M. No evidence of enicity in rat; undeter- mined in mouse.	ADI UF: 300 OPPADI: 0.02 RFD: 0.02 WHOADI: 0 QSTAR: 0	Oncogenicity - mouse (Current study has olved MTD issue) Additional UF of 3 used until repro study is reevaluated.	HED reviewed 05/25/89 EPA verified 06/15/89 (HED to reevaluate rat reproduction study) On IRIS.
Chlorine CAS: 7782-50-5 EPA Chem Code: 020501 CASWELL: 179 CFR: CFR185: REG_GROUP:	2yr feeding- mouse NOEL: 24 mg/kg/day 0 ppm LEL: 0 mg/kg/day 0 ppm List D Cancer.	No effects were Chronic rat study 14.4 mg/kg-day; study is co-principal.	UF: 300 OPPADI: 0.08 RFD: 0.08 WHOADI: 0 QSTAR: 0		EPA verified 07/20/93
Chlormequat chloride CAS: 999-81-5 EPA Chem Code: 018101 CASWELL: 191 CFR: CFR185: REG_GROUP:	NOEL: 0 mg/kg/day 0 ppm LEL: 0 mg/kg/day 0 ppm Cancer.		UF: OPPADI: 0 RFD: 0 WHOADI: 0.05 QSTAR: 0		WHO reviewed 1972
Chloroaniline, p- CAS: 106-47-8 EPA Chem Code: 017203 CASWELL: 182 CFR: CFR185: REG_GROUP:	102wk feeding- rat NOEL: 0 mg/kg/day 0 ppm LEL: 12.5 mg/kg/day 0 ppm Cancer: B2 (HCPRC)	Non-neoplastic lesions splenic capsule and parenchyma. [This chemical is a metabolite of Diflubenzuron]	PLD UF: 3000 OPPADI: 0.004 RFD: 0.004 WHOADI: 0 QSTAR: 0.00638	Chronic feed/onoc- rat Chronic feeding- dog Reproduction- rat Developmental tox- rat Developmental tox-	EPA verified 12/15/87 HED concurs 12/15/87 On IRIS.
Chlorobenzilate CAS: 510-15-6 EPA Chem Code: 028801 CASWELL: 434 CFR: 180.109 CFR185: REG GROUP:	Develop tox- rabbit NOEL: 5 mg/kg/day 0 ppm LEL: 20 mg/kg/day 0 ppm LIST A - Cancer. 3 (IRAC)	Decr stool quantity, decr food consumption & wt gain; hyperirritability. Evidence of ity in mice (liver).	PADI UF: 300 OPPADI: 0.02 RFD: 0.02 WHOADI: 0.02 QSTAR: 0	Chronic feed/carcino- Additional UF of 3 to account for the lack of a chronic rat study.	WHO reviewed 1980 HED reviewed 12/04/86 HED reviewed 04/19/89 EPA verified 05/17/89 On IRIS.

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CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Chloroform CAS: 67-66-3 EPA Chem Code: 020701 CASWELL: 192 CFR: CFR185: REG_GROUP:	Chronic feeding- NOEL: 0 mg/kg/day 0 ppm LEL: 12.9 mg/kg/day 0 ppm Cancer: B2 (CRAVE)	Fatty cyst formation in liver.	UF: 1000 OPPADI: 0 RFD: 0.01 WHOADI: 0 QSTAR: 0.0061	Critical study and data base not reviewed by RfD/PR Committee.	EPA verified 12/02/85 On IRIS.
Chloroneb CAS: 2675-77-6 EPA Chem Code: 027301 CASWELL: 198 CFR: 180.257 CFR185: REG_GROUP:	2yr feed-dog NOEL: 12.5 mg/kg/day 500 ppm LEL: 62.5 mg/kg/day 2500 ppm LIST A (6A) Cancer.	Increased SGPT & SAP.	PADI UF: 1000 OPPADI: 0.013 RFD: 0 WHOADI: 0 QSTAR: 0	Critical study and data base not reviewed by RfD/PR Committee. (Extra 10-fold UF for poor study quality)	Ad Hoc Meeting
Chlorophacinone CAS: 3691-35-8 EPA Chem Code: 067707 CASWELL: 211C CFR: CFR185: REG_GROUP:	NOEL: mg/kg/day ppm LEL: mg/kg/day ppm Cancer:		UF: OPPADI: RFD: WHOADI: QSTAR:	Since this chemical is not intended for food uses & since chronic or life time exposure is an unlikely scenario, an was not established.	RfD/PR reviewed
Chloropicrin (Nemax) CAS: 76-06-2 EPA Chem Code: 081501 CASWELL: 214 CFR: 180.1008 CFR185: REG_GROUP:	NOEL: 0 mg/kg/day 0 ppm LEL: 0 mg/kg/day 0 ppm LIST A (6A) Cancer.		UF: 0 OPPADI: 0 RFD: 0 WHOADI: 0 QSTAR: 0	Exempt from tolerance; grain fumigant (Residue thought to be negligible)	WHO reviewed 1965; not established. Ad hoc meeting
Chloropropylate CAS: 5836-10-2 EPA Chem Code: 026801 CASWELL: 511B CFR: 180.218 CFR185: REG GROUP:	NOEL: 0 mg/kg/day 0 ppm LEL: 0 mg/kg/day 0 ppm Cancer:		UF: 0 OPPADI: 0 RFD: 0 WHOADI: 0 QSTAR: 0		WHO reviewed 1972; withdrawn.

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CHEMICAL	STUDY TYPE		EFFECTS	REFERENCE DOSES		DATA GAPS/COMMENTS	STATUS
Chlorosulfamic acid				UF:	0		
CAS: 17172-27-9	NOEL:	0 mg/kg/day		OPPADI:	0		
EPA Chem Code: 215200		0 ppm		RFD:	0		
CASWELL: 215C	LEL:	0 mg/kg/day		WHOADI:	0		
CFR: 180.201		0 ppm		QSTAR:	0		
CFR185:							
REG_GROUP:	Cancer:						
Chlorothalonil	2yr feeding-rat		Incr neoplastic lesions	ADI UF:	100	No data gaps.	EPA verified 04/08/86
CAS: 1897-45-6	NOEL:	2 mg/kg/day	of forestomach &	OPPADI:	0.02		WHO reviewed 1992
EPA Chem Code: 081901		0 ppm		RFD:	0.015		RfD/PR reviewed
CASWELL: 215B	LEL:	4 mg/kg/day	Evidence of	WHOADI:	0.03		RfD/PR reviewed
CFR: 180.275		0 ppm	ity in rats & mice (kid-	QSTAR:	0.0077		RfD/PR reviewed
CFR185:			ney).				On IRIS.
REG_GROUP:	LIST A (4	Cancer: B2 (HCPRC)					
Chloroxuron				UF:	0		
CAS: 1982-47-4	NOEL:	0 mg/kg/day		OPPADI:	0		
EPA Chem Code: 025501		0 ppm		RFD:	0		
CASWELL: 217B	LEL:	0 mg/kg/day		WHOADI:	0		
CFR: 180.216		0 ppm		QSTAR:	0		
CFR185:							
REG_GROUP:	Cancer:						
Chlorpropham (CIPC)	1yr feeding-dog		Incr absolute & relative	ADI UF:	100	No data gaps.	WHO reviewed 1965;
CAS: 101-21-3	NOEL:	5 mg/kg/day	thyroid wt.; Decr T4 &	OPPADI:	0.05		not established.
EPA Chem Code: 018301		0 ppm	levels in animals w/enla-	RFD:	0.2		HED reassess 06/19/87
CASWELL: 510A	LEL:	50 mg/kg/day	rged thyroids.	WHOADI:	0		EPA verified 08/12/87
CFR: 180.181		0 ppm	No evidence of	QSTAR:	0		RfD/PR reviewed
CFR185:			enicity in rats or mice.				On IRIS.
REG_GROUP:	LIST A (6C)	Cancer: E (HCPRC)					
Chlorpyrifos	Human 20 day		Decreased plasma ChE.	ADI UF:	10	No data gaps.	WHO reviewed 1982
CAS: 2921-88-2	NOEL:	0.03 mg/kg/day	No other systemic	OPPADI:	0.003		EPA verified 03/11/86
EPA Chem Code: 059101		0 ppm	identified.	RFD:	0.003		RfD/PR reviewed
CASWELL: 219AA	LEL:	0.1 mg/kg/day		WHOADI:	0.01		RfD/PR reviewed
CFR: 180.342		0 ppm	No evidence of	QSTAR:	0		RfD/PR reviewed
CFR185: 185.1000			enicity in rats or mice.				On IRIS.
REG GROUP:	LIST A Cancer:		E (RfD/PR				

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CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Chlorpyrifos-methyl	2yr feeding- dog	Inhibition of plasma and	ADI UF: 10	No data gaps.	HED reviewed 01/13/87
CAS: 5598-13-0	NOEL: 0.1 mg/kg/day	RBC ChE. Doses by	OPPADI: 0.01		EPA deferred 02/18/87
EPA Chem Code: 059102	0 ppm		RFD: 0		Pending RAC approval
CASWELL: 179AA	LEL: 1 mg/kg/day		WHOADI: 0.01		RAF ChE report.
CFR: 180.419	0 ppm	No evidence of	QSTAR: 0		WHO reviewed 1992
CFR185: 185.1050		enicity in rats or mice.			
REG_GROUP:	Cancer: Negative- 2				
Chlorsulfuron	2yr feeding- rat	Decreased weight gain.	ADI UF: 100	No data gaps.	HED reviewed 03/14/86
CAS: 64902-72-3	NOEL: 5 mg/kg/day		OPPADI: 0.05		EPA verified 04/08/86
EPA Chem Code: 118601	100 ppm		RFD: 0.05		
CASWELL: 194AA	LEL: 25 mg/kg/day		WHOADI: 0		
CFR: 180.405	500 ppm	No evidence of	QSTAR: 0		
CFR185:		enicity in rats or mice.			On IRIS.
REG_GROUP:	LIST A (6A) Cancer: Negative- 2				
Chlorthion (Chlorothion)			UF:		WHO reviewed 1965;
CAS: 500-28-7	NOEL: 0 mg/kg/day		OPPADI: 0		not established.
EPA Chem Code: 034501	0 ppm		RFD: 0		
CASWELL: 201	LEL: 0 mg/kg/day		WHOADI: 0		
CFR:	0 ppm		QSTAR: 0		
CFR185:					
REG_GROUP:	Cancer:				
Chlorthiophos			UF: 0		
CAS: 21923-23-9	NOEL: 0 mg/kg/day		OPPADI: 0		
EPA Chem Code: 111811	0 ppm		RFD: 0		
CASWELL: 310A	LEL: 0 mg/kg/day		WHOADI: 0		
CFR: 180.398	0 ppm		QSTAR: 0		
CFR185:					
REG_GROUP:	Cancer:				
Cinch (Cinmethylin)			UF: 0		
CAS: 87818-31-3	NOEL: 0 mg/kg/day		OPPADI: 0		
EPA Chem Code: 128837	0 ppm		RFD: 0		
CASWELL: 731G	LEL: 0 mg/kg/day		WHOADI: 0		
CFR:	0 ppm		QSTAR: 0		
CFR185:		Insufficient dosing.			
REG GROUP:	Cancer: D (HED)				

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CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Clethodim (Select Herbacide) CAS: 99129-21-2 EPA Chem Code: 121011 CASWELL: 721F CFR: 180.458 CFR185: REG_GROUP:	1yr feeding- dog NOEL: 1 mg/kg/day 0 ppm LEL: 75 mg/kg/day 0 ppm Newchemical Cancer: Negative- 2	Incr absolute & relative liver wts in F; Alterations in hematology & clinical chemistry M & F. No evidence of enicity in rats or mice.	ADI UF: 100 OPPADI: 0.01 RFD: 0 WHOADI: 0 QSTAR: 0	No data gaps.	RfD/PR reviewed
Clofentezine (Apollo) CAS: 74115-24-5 EPA Chem Code: 125501 CASWELL: 593A CFR: 180.446 CFR185: REG_GROUP:	1yr feeding- dog NOEL: 1.25 mg/kg/day 50 ppm LEL: 25 mg/kg/day 1000 ppm Cancer: C (HED/CRAVE); D	Increased organ histo changes in liver, liver chemistry changes. Rat & mouse ity studies in progress.	ADI UF: 100 OPPADI: 0.013 RFD: 0.013 WHOADI: 0.02 QSTAR: 0	No data gaps.	WHO reviewed 1986 HED reviewed 03/31/86 EPA verified 04/22/86 EPA verified 09/16/87 On IRIS.
Clomazone (Dimethazone) CAS: 81777-89-1 EPA Chem Code: 125401 CASWELL: 463D CFR: 180.425 CFR185: REG_GROUP:	2yr feeding- rat NOEL: 4.3 mg/kg/day 100 ppm LEL: 21.5 mg/kg/day 500 ppm Cancer: Negative - 2	Increased serum terol and relative liver weights.	ADI UF: 100 OPPADI: 0.043 RFD: 0 WHOADI: 0 QSTAR: 0	No data gaps. [Syn. Command]	HED reviewed 07/24/87 EPA pending 08/12/87- to review statistics issue involving and liver wt changes in the critical study.
Cloprop (+ salts) (Fruitone) CAS: 53404-22-1 EPA Chem Code: 021202 CASWELL: 206 CFR: 180.325 CFR185: REG_GROUP:	90d feeding-dog NOEL: 12.5 mg/kg/day 500 ppm LEL: 0 mg/kg/day 0 ppm LIST B Cancer:		PADI UF: 1000 OPPADI: 0.0125 RFD: 0 WHOADI: 0 QSTAR: 0	Critical study and data base not reviewed by RFD/PR Committee.	RFD NOT VERIFIED BY AGENCY COMMITTEES.
Clopyralid (Lontrel) CAS: 1702-17-6 EPA Chem Code: 117403 CASWELL: 323H CFR: 180.431 CFR185: 185.1100 REG GROUP:	2yr feeding - rat NOEL: 50 mg/kg/day 0 ppm LEL: 150 mg/kg/day 0 ppm Cancer: Negative- 2	Decreased mean body females. No evidence of enicity in rats or mice.	ADI UF: 100 OPPADI: 0.5 RFD: 0 WHOADI: 0 QSTAR: 0	No data gaps.	HED reviewed 05/05/88 EPA deferred 07/20/88 OPP to consider 2nd rat study in establishing RfD.

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CHEMICAL	STUDY TYPE		EFFECTS	REFERENCE DOSES		DATA GAPS/COMMENTS	STATUS
Coal tar/Creosote				UF:	0	No food uses.	
CAS: 8007-45-2	NOEL:	0 mg/kg/day		OPPADI:	0		
EPA Chem Code: 022003		0 ppm		RFD:	0	Also see Caswell No.	
CASWELL: 223	LEL:	0 mg/kg/day		WHOADI:	0		
CFR:		0 ppm		QSTAR:	0		
CFR185:							
REG_GROUP:	LIST A (6C)	Cancer.					
Copper arsenate	Chronic feeding-		Data for orthoarsenic acid.	PADI UF:	100	Critical study and data base not reviewed by RFD/PR Committee.	RFD NOT VERIFIED BY AGENCY COMMITTEES.
CAS: 10103-61-4	NOEL:	0.42 mg/kg/day		OPPADI:	0.0042		
EPA Chem Code: 022801		16.8 ppm		RFD:	0		
CASWELL: 232	LEL:	0 mg/kg/day		WHOADI:	0		
CFR: 180.193		0 ppm		QSTAR:	0		
CFR185:							
REG_GROUP:	Cancer.						
Copper carbonate (basic)				UF:	0	Insufficient data for RfD determination.	
CAS: 12069-69-1	NOEL:	0 mg/kg/day		OPPADI:	0		
EPA Chem Code: 022901		0 ppm		RFD:	0		
CASWELL: 235	LEL:	0 mg/kg/day		WHOADI:	0		
CFR: 180.136		0 ppm		QSTAR:	0		
CFR185:							
REG_GROUP:	LIST A (5SRR)	Cancer.					
Copper sulfate				UF:	0	Exempt from tolerances.	
CAS: 7758-99-8	NOEL:	0 mg/kg/day		OPPADI:	0		
EPA Chem Code: 024401		0 ppm		RFD:	0	Also see CFR 180.1021	
CASWELL: 256	LEL:	0 mg/kg/day		WHOADI:	0		
CFR: 180.1001		0 ppm		QSTAR:	0		
CFR185: 185.1200							
REG_GROUP:	LIST A (6B)	Cancer.					
Copper, and oxides				UF:		Insufficient data for RfD determination. A naturally occurring element. An RfD is not required (WB).	Ad hoc meeting
CAS: 7440-50-8	NOEL:	0 mg/kg/day		OPPADI:	0		
EPA Chem Code: 022501		0 ppm		RFD:	0		
CASWELL: 227	LEL:	0 mg/kg/day		WHOADI:	0		
CFR:		0 ppm		QSTAR:	0		
CFR185: 185.1200							
REG GROUP:	LIST D	Cancer.	D (CRAVE)				

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CHEMICAL	STUDY TYPE		EFFECTS	REFERENCE DOSES		DATA GAPS/COMMENTS	STATUS
Coumafuryl (Fumarin)				UF:	0		
CAS: 117-52-2	NOEL:	0 mg/kg/day		OPPADI:	0		
EPA Chem Code: 086001		0 ppm		RFD:	0		
CASWELL: 005	LEL:	0 mg/kg/day		WHOADI:	0		
CFR:		0 ppm		QSTAR:	0		
CFR185:							
REG_GROUP:	LIST A -	Cancer.					
Coumaphos	1yr feeding- dog		Plasma & RBC ChE	ADI UF:	100	No data gaps.	HED reviewed 03/30/89
CAS: 56-72-4	NOEL:	0.025 mg/kg/day	ion in males & females.	OPPADI:	0.00025		EPA deferred 04/20/89
EPA Chem Code: 036501		1 ppm		RFD:	0		WHO reviewed 1990;
CASWELL: 335	LEL:	0.775 mg/kg/day		WHOADI:	0		not established.
CFR: 180.189		30 ppm	No evidence of	QSTAR:	0		RfD/PR reviewed
CFR185:			nicity in rats or mice.				
REG_GROUP:	LIST A (5	Cancer. E (RfD/PR					
Cresol, p-Chloro-m-	2yr feeding- rat		Statistically significant	PADI UF:	3000	Chronic feeding- dog	RfD/PR reviewed
CAS: 59-50-7	NOEL:	0 mg/kg/day	incr in brain depression	OPPADI:	0.009	Reproduction- rat	
EPA Chem Code: 064206		0 ppm	due to enlarged pituitary	RFD:	0	Developmental tox-	
CASWELL: 185A	LEL:	27.7 mg/kg/day	in females.	WHOADI:	0	Carcinogenicity- mouse	
CFR:		400 ppm		QSTAR:	0	[Syn. Parachlorometa-	
CFR185:						cresol]	
REG_GROUP:	LIST C	Cancer. D (HCPRC)					
Crotoxyphos				UF:	0		
CAS: 7700-17-6	NOEL:	0 mg/kg/day		OPPADI:	0		
EPA Chem Code: 058801		0 ppm		RFD:	0		
CASWELL: 378	LEL:	0 mg/kg/day		WHOADI:	0		
CFR: 180.280		0 ppm		QSTAR:	0		
CFR185:							
REG_GROUP:	LIST B	Cancer.					
Crufomate (Ruelene)				UF:	0	All tolerances revoked	WHO reviewed 1968
CAS: 299-86-5	NOEL:	0 mg/kg/day		OPPADI:	0	1993.	
EPA Chem Code: 012101		0 ppm		RFD:	0		
CASWELL: 263A	LEL:	0 mg/kg/day		WHOADI:	0.1		
CFR: 180.295		0 ppm		QSTAR:	0		
CFR185:							
REG GROUP:	Cancer.						

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CHEMICAL	STUDY TYPE		EFFECTS	REFERENCE DOSES		DATA GAPS/COMMENTS	STATUS
Cryolite (Kryocide)				UF:	0	RfD value pending	HED reviewed 02/09/88
CAS: 15096-52-3	NOEL:	0 mg/kg/day		OPP ADI:	0	re-evaluation of Fluoride	Ad hoc meeting
EPA Chem Code: 075101		0 ppm		RFD:	0	(soluble fluoride) RfD.	RfD/PR reviewed
CASWELL: 264	LEL:	0 mg/kg/day		WHO ADI:	0		RfD/PR reviewed
CFR: 180.145		0 ppm		QSTAR:	0		
CFR185:							
REG_GROUP:	LIST A (4	Cancer: D (HED)					
Cyanazine (Bladex)	2yr feeding- rat		Decreased body weight	ADI UF:	100	No data gaps.	EPA verified 05/25/88
CAS: 21725-46-2	NOEL:	0.2 mg/kg/day	gain in females; hyper-	OPP ADI:	0.002		RfD/PR reviewed
EPA Chem Code: 100101		5 ppm	activity in males	RFD:	0.002		EPA verified 05/27/92
CASWELL: 188C	LEL:	0.99 mg/kg/day		WHO ADI:	0		RfD/PR reviewed
CFR: 180.307		25 ppm	Evidence of	QSTAR:	1		CRAVE verified
CFR185:			ity in rats (mammary).				On IRIS.
REG_GROUP:	LIST A (6A)	Cancer: C(q) (HED)					
Cyanofenphos (Surecide)				UF:			WHO reviewed 1983;
CAS: 13067-93-1	NOEL:	0 mg/kg/day		OPP ADI:	0		ADI withdrawn.
EPA Chem Code: 268400		0 ppm		RFD:	0		
CASWELL: 268G	LEL:	0 mg/kg/day		WHO ADI:	0		
CFR:		0 ppm		QSTAR:	0		
CFR185:							
REG_GROUP:	Cancer:						
Cyclanilide	2gen reprod- rat		Reduced body weights	ADI UF:	300	No data gaps.	RfD/PR reviewed
CAS: 113136-77-9	NOEL:	mg/kg/day	feed consumption (F1	OPP ADI:	0.007		
EPA Chem Code: 026201		ppm	& increased renal miner-	RFD:		Additional UF of 3 to	
CASWELL:	LEL:	20 mg/kg/day	alization (F1 F).	WHO ADI:		account for lack of an	
CFR:		30 ppm	Referred to HED	QSTAR:		established NOEL.	
CFR185:			enicity Peer Review				
REG_GROUP:	Newchemical	Cancer: Not Likely (RFDC)					
Cycloate (Ro-Neet)	2yr feeding- rat		Distended myelin sheath	UF:	100	Critical study and data	HED RfD pending
CAS: 1134-23-2	NOEL:	0.5 mg/kg/day	demylination/atrophy/	OPP ADI:	0.005	base not reviewed by	Postponed indefinately.
EPA Chem Code: 041301		10 ppm	nerve fiber loss.	RFD:	0	RfD/PR Committee.	EPA pending 03/26/86-
CASWELL: 432A	LEL:	3 mg/kg/day		WHO ADI:	0		deferred until completion
CFR: 180.212		60 ppm		QSTAR:	0		of OPP Special Review.
CFR185:							Ad hoc meeting
REG GROUP:	LIST B	Cancer:					

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CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Cyclohexanone	Chronic feeding-	Body weight	UF: 100	Critical study and data	EPA verified 9/02/86
CAS: 108-94-1	NOEL: 462 mg/kg/day		OPPADI: 0	base not reviewed by	
EPA Chem Code: 025902	3300 ppm		RFD: 5	RfD/PR Committee.	
CASWELL: 270	LEL: 910 mg/kg/day		WHOADI: 0		
CFR:	6500 ppm		QSTAR: 0		
CFR185:					On IRIS.
REG_GROUP:	LIST C Cancer.	Undetermined.			
Cycloheximide			UF: 0		
CAS: 66-81-9	NOEL: 0 mg/kg/day		OPPADI: 0		
EPA Chem Code: 043401	0 ppm		RFD: 0		
CASWELL: 270A	LEL: 0 mg/kg/day		WHOADI: 0		
CFR: 180.336	0 ppm		QSTAR: 0		
CFR185:					
REG_GROUP:	LIST A - Cancer.				
Cycloxydim (Focus)			UF:		WHO reviewed 1992
CAS: 101205-02-1	NOEL: 0 mg/kg/day		OPPADI: 0		
EPA Chem Code:	0 ppm		RFD: 0		
CASWELL:	LEL: 0 mg/kg/day		WHOADI: 0.07		
CFR:	0 ppm		QSTAR: 0		
CFR185:					
REG_GROUP:	Cancer.				
Cyfluthrin (Baythroid)	2yr feeding- rat	Decreased body	PADI UF: 100	Developmental tox-	HED reviewed 03/14/86
CAS: 68359-37-5	NOEL: 2.5 mg/kg/day	inflammation of kidney.	OPPADI: 0.025	(core supplementary)	EPA verified 04/08/86
EPA Chem Code: 128831	50 ppm	Doses based on food	RFD: 0.025		WHO reviewed 1987
CASWELL: 266E	LEL: 6.2 mg/kg/day	sumption.	WHOADI: 0.02		
CFR: 180.436	150 ppm	No evidence of	QSTAR: 0		
CFR185: 185.1250		enicity in rats or mice.			On IRIS.
REG_GROUP:	Cancer: Negative- 2				
Cyhalothrin K			UF:		
CAS: 91465-08-6	NOEL: 0 mg/kg/day		OPPADI: 0		
EPA Chem Code: 128897	0 ppm		RFD: 0		
CASWELL:	LEL: 0 mg/kg/day		WHOADI: 0		
CFR:	0 ppm		QSTAR: 0		
CFR185: 185.1310				[Syn.	
REG GROUP:	Cancer.				

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CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Cyhalothrin/Karate CAS: 68085-85-8 EPA Chem Code: 128867 CASWELL: 271F CFR: 180.438 CFR185: REG_GROUP:	1yr feeding- dog NOEL: 0.1 mg/kg/day 0 ppm LEL: 0.5 mg/kg/day 0 ppm Cancer: D (RfD/PR	Clinical signs of neuro-toxicity. No evidence of enicity in rats; incon-clusive for mice.	ADI UF: 100 OPPADI: 0.001 RFD: 0.005 WHOADI: 0.02 QSTAR: 0	No data gaps. Additional data on study is requested. Chemical is a mixture of several isomers, Karate is two isomers only.	WHO reviewed 1984 HED reviewed 05/29/86 EPA verified 07/15/87 RfD/PR reviewed RfD/PR reviewed On IRIS.
Cyhexatin (TCTH) CAS: 13121-70-5 EPA Chem Code: 101601 CASWELL: 884A CFR: 180.144 CFR185: 185.1350 REG_GROUP:	6mo feeding- dog NOEL: 0 mg/kg/day 0 ppm LEL: 0.75 mg/kg/day 30 ppm LIST A - Cancer: Negative- 1	Increased relative of heart and brain, de-creased food No evidence of enicity in rats, mouse study pending.	PADI UF: 1000 OPPADI: 0.00075 RFD: 0 WHOADI: 0.001 QSTAR: 0	Chronic feed/carcino- Chronic feeding- dog (Supplementary data) Reproduction- rat Developmental tox- 2 2yr dog study co-critical	HED reviewed 11/03/86 WHO reviewed 1991
Cypermethrin (Ammo) CAS: 52315-07-8 EPA Chem Code: 109702 CASWELL: 268AA CFR: 180.418 CFR185: REG_GROUP:	1yr feeding- dog NOEL: 1 mg/kg/day 0 ppm LEL: 5 mg/kg/day 0 ppm LIST B Cancer: C (HED)	G.I. tract disturbance. Evidence of ity in mice (lung).	ADI UF: 100 OPPADI: 0.01 RFD: 0.01 WHOADI: 0.05 QSTAR: 0	No data gaps. (Cypermethrin, d-trans-beta, PC Code: 109704; Cas No. 66841-24-5; Caswell No. 271DD).	WHO reviewed 1981 HED reviewed 12/05/88 EPA verified 01/18/89 RfD/PR reviewed RfD/PR reviewed On IRIS.
Cyprazine CAS: 22936-86-3 EPA Chem Code: 100401 CASWELL: 271D CFR: 180.306 CFR185: REG_GROUP:	NOEL: 0 mg/kg/day 0 ppm LEL: 0 mg/kg/day 0 ppm Cancer:		UF: 0 OPPADI: 0 RFD: 0 WHOADI: 0 QSTAR: 0		
Cyproconazole (SAN 619F) CAS: 94361-06-5 EPA Chem Code: 128993 CASWELL: 272E CFR: CFR185: REG GROUP:	1yr feedng - dog NOEL: 1 mg/kg/day 30 ppm LEL: 3.2 mg/kg/day 100 ppm Newchemical Cancer: B2 (HCPRC)	Incr in cytochrome changes in clincal istry. Evidence of ity in mice (liver, M).	ADI UF: 100 OPPADI: 0.01 RFD: 0 WHOADI: 0 QSTAR: 0.302	Oncogenicity - rat	RfD/PR reviewed

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CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Cyromazine (Larvadex)	6mo feeding- dog	Decreased hematocrit	ADI UF: 100	No data gaps.	HED reviewed 06/19/86
CAS: 66215-27-8	NOEL: 0.75 mg/kg/day	hemoglobin. Negative	OPPADI: 0.0075	6mo dog study	EPA verified 08/05/86
EPA Chem Code: 121301	30 ppm	carcinogenicity in rats &	RFD: 0.0075	for chronic feeding	WHO reviewed 1990
CASWELL: 167B	LEL: 7.5 mg/kg/day	mice, however	WHOADI: 0.02	requirement.	
CFR: 180.414	300 ppm	melamine causes	QSTAR: 0		
CFR185:		tumor in male rats.			On IRIS.
REG_GROUP:	Cancer: E (HCPRC)				
DDD			UF: 0		
CAS: 72-54-8	NOEL: 0 mg/kg/day		OPPADI: 0		
EPA Chem Code: 029101	0 ppm		RFD: 0		
CASWELL: 307	LEL: 0 mg/kg/day		WHOADI: 0		
CFR: 180.187	0 ppm		QSTAR: 0.24		
CFR185:					
REG_GROUP:	Cancer: B2 (CRAVE)				
DDT	15-27wk feeding-	Altered morphology of	UF: 100	Critical study and data	WHO reviewed 1984
CAS: 50-29-3	NOEL: 0.05 mg/kg/day	liver cells.	OPPADI: 0	base not reviewed by	EPA verified 12/18/85
EPA Chem Code: 029201	1 ppm	(This study was used	RFD: 0.0005	RfD/PR committee.	
CASWELL: 308	LEL: 0.25 mg/kg/day	ORD).	WHOADI: 0.02		
CFR: 180.147	5 ppm		QSTAR: 0.34		
CFR185:					On IRIS.
REG_GROUP:	LIST B Cancer: B2 (CRAVE)				
DEET	2yr feeding- rat	Decr. body wt in F. 1yr	ADI UF: 100	No data gaps.	RfD/PR reviewed
CAS: 134-62-3	NOEL: 100 mg/kg/day	dog study is co-critical:	OPPADI: 0.9	No food uses.	
EPA Chem Code: 080301	0 ppm	NOEL/LEL =100/400	RFD: 0		
CASWELL: 346	LEL: 400 mg/kg/day	based on decr. food	WHOADI: 0		
CFR:	0 ppm	sumption, body wts &	QSTAR: 0	[Syn. N,N-Diethyl-meta-	
CFR185:		lesterol levels.		toluamide]	
REG_GROUP:	LIST A (6B) Cancer: D (RfD/PR				
DNOC (4,6-Dinitro-o-cresol)			UF:		WHO reviewed 1965;
CAS: 534-52-1	NOEL: 0 mg/kg/day		OPPADI: 0		ADI not established.
EPA Chem Code: 037507	0 ppm		RFD: 0		
CASWELL: 390	LEL: 0 mg/kg/day		WHOADI: 0		
CFR:	0 ppm		QSTAR: 0		
CFR185:					
REG GROUP:	Cancer:				

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CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Dacthal (DCPA) CAS: 1861-32-1 EPA Chem Code: 078701 CASWELL: 382 CFR: 180.185 CFR185: REG_GROUP:	2yr feeding-rat NOEL: 1 mg/kg/day 0 ppm LEL: 50 mg/kg/day 0 ppm LIST A (6C) Cancer: C(q) (HCPRC)	Effects on the lungs, liver, thyroid & thyroid hormones in M&F; Eye ects in females. Referred to HED enicity Peer Review	ADI UF: 100 OPPADI: 0.01 RFD: 0.01 WHOADI: 0 QSTAR: 0.00149	No data gaps.	EPA verified 02/18/87 HED reassess 09/28/87 EPA verified 06/22/88 RfD/PR reviewed EPA verified 02/17/94 On IRIS.
Dalapon CAS: 75-99-0 EPA Chem Code: 028901 CASWELL: 273 CFR: 180.150 CFR185: 185.1500 REG_GROUP:	2yr feeding-rat NOEL: 8.45 mg/kg/day 0 ppm LEL: 28.2 mg/kg/day 0 ppm LIST A - Cancer: Undetermined	Increased relative weight. Doses on basis of %a.i. and Na (15 and 50 mg/kg/day of Na-dalapon). No genicity data available.	PADI UF: 300 OPPADI: 0.03 RFD: 0.03 WHOADI: 0 QSTAR: 0	Chronic feed/carcino- Chronic feeding-dog Reproduction-rat Teratology- 2 species Extra UF of 3 due to gaps.	HED reviewed 06/09/86 HED reassess 04/03/87 EPA deferred 08/12/87 HED reassess 05/20/88 EPA verified 06/22/88 On IRIS.
Daminozide (Alar) CAS: 1596-84-5 EPA Chem Code: 035101 CASWELL: 808 CFR: 180.246 CFR185: REG_GROUP:	1yr feeding-dog NOEL: 0 mg/kg/day 7500 ppm LEL: 0 mg/kg/day 0 ppm LIST A (3 SR) Cancer: B2 (HED)	No effects noted at Metabolite UDMH. Evidence of ity in rats and mice.	ADI UF: 100 OPPADI: 2 RFD: 0.15 WHOADI: 0.5 QSTAR: 0.0087	No data gaps. All food uses have been cancelled.	HED reviewed 08/28/87 EPA verified 09/16/87 WHO reviewed 1991 RfD/PR reviewed On IRIS.
Dazomet CAS: 533-74-4 EPA Chem Code: 035602 CASWELL: 840 CFR: CFR185: REG_GROUP:	1yr feeding-dog NOEL: 0.35 mg/kg/day 15 ppm LEL: 1.05 mg/kg/day 50 ppm List B Cancer: D (HCPRC)	Incr liver:body wt ratio, incr liver enzymes & other liver effects.	PADI UF: 100 OPPADI: 0.0035 RFD: 0 WHOADI: 0 QSTAR: 0	Developmental tox- Oncogenicity-mouse	RfD PR reviewed
Deltamethrin (Deca-) CAS: 52918-63-5 EPA Chem Code: 097805 CASWELL: 463B CFR: 180.435 CFR185: 185.1580 REG GROUP:	2yr feeding-rat NOEL: 1 mg/kg/day 20 ppm LEL: 2.5 mg/kg/day 50 ppm Cancer: Negative- 2	Decreased body weight gain. No evidence of enicity in rats or mice.	ADI UF: 100 OPPADI: 0.01 RFD: 0 WHOADI: 0.01 QSTAR: 0	No data gaps.	WHO reviewed 1982 HED complete 01/30/87 EPA verified 07/15/87 EPA deferred 02/25/88 Pending further review

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CHEMICAL	STUDY TYPE			EFFECTS	REFERENCE DOSES			DATA GAPS/COMMENTS	STATUS
Demeton	2yr feeding- rat			Data from disulfoton rat	PADI UF:		1000	Additional studies to	WHO reviewed 1994;
CAS: 8065-48-3	NOEL:	0	mg/kg/day	chronic feeding study	OPPADI:		0.00004	evaluate eye effects	ADI not estalished.
EPA Chem Code: 057601		0	ppm	used per Demeton R.S.	RFD:		0.00004	disulfoton.	HED reviewed 05/29/86
CASWELL: 279	LEL:	0.04	mg/kg/day	(see disulfoton).	WHOADI:		0	Subchronic feeding- 2	EPA verified 07/22/86
CFR: 180.105		0.8	ppm	NOEL not established	QSTAR:		0	species + plant metab.	
CFR185:				eye effects.				Developmental tox- 2	On IRIS.
REG_GROUP:	LIST A - Cancer:			Negative (disulf)					
Desmedipham	2-gen reprod - rat			Significant increase in	ADI UF:		100	No data gaps.	RfD/PR reviewed
CAS: 13684-56-5	NOEL:	4	mg/kg/day	splenic weights &	OPPADI:		0.04		RfD/PR reviewed
EPA Chem Code: 104801		50	ppm	ensatory functioning of	RFD:		0	RfD is also supported	
CASWELL: 447AAA	LEL:	20	mg/kg/day	the thryoid.	WHOADI:		0	the chronic rat and dog	
CFR: 180.353		250	ppm	No evidence of	QSTAR:		0	studies.	
CFR185:				enicity in rats or mice.					
REG_GROUP:	LIST B Cancer:			E (RfD/PR					
Dialifor (Dialifos)						UF:	0		WHO reviewed 1982;
CAS: 10311-84-9	NOEL:	0	mg/kg/day		OPPADI:		0		ADI withdrawn.
EPA Chem Code: 102501		0	ppm		RFD:		0		
CASWELL: 280A	LEL:	0	mg/kg/day		WHOADI:		0		
CFR: 180.326		0	ppm		QSTAR:		0		
CFR185: 185.1650									
REG_GROUP:	LIST A -		Cancer:						
Diallate (Avadex)	3gen reprod- rat			No observed effects at		UF:	1000	Critical study and data	Ad Hoc Meeting
CAS: 2303-16-4	NOEL:	5	mg/kg/day	5 mg/kg/day (HDT).	OPPADI:		0.005	base not reviewed by	
EPA Chem Code: 078801		100	ppm		RFD:		0	RfD/PR Committee.	
CASWELL: 299	LEL:	0	mg/kg/day		WHOADI:		0		
CFR: 180.277		0	ppm		QSTAR:		0		
CFR185:									
REG_GROUP:	LIST A -		Cancer:						
Diazinon	90d feeding- rat			Inhibition of plasma ChE.	PADI UF:		100	Chronic feed/carcino-	HED reviewed 09/19/86
CAS: 333-41-5	NOEL:	0.009	mg/kg/day		OPPADI:		0.00009	Chronic feeding- dog	EPA deferred 11/25/86
EPA Chem Code: 057801		0.1	ppm		RFD:		0	Reproduction- rat	WHO reviewed 1993
CASWELL: 342	LEL:	0.025	mg/kg/day		WHOADI:		0.002		
CFR: 180.153		0.5	ppm	No evidence of	QSTAR:		0		
CFR185: 185.1750				enicity in rats or mice.					
REG GROUP:	LIST A (3 SR)		Cancer:	Negative- 2					

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CHEMICAL	STUDY TYPE			EFFECTS	REFERENCE DOSES		DATA GAPS/COMMENTS	STATUS
Dibromochloropropane					UF:	0		
CAS: 96-12-8	NOEL:	0	mg/kg/day		OPPADI:	0		
EPA Chem Code: 011301		0	ppm		RFD:	0		
CASWELL: 287	LEL:	0	mg/kg/day		WHOADI:	0		
CFR: 180.197		0	ppm		QSTAR:	1.4	Oral Q*: 1.4E-0	
CFR185:								
REG_GROUP:	3 SR	Cancer:		B2 (CAG)				
Dibutyl phthalate	1yr feeding- rat			Increased mortality.	UF:	1000	Critical study and data	EPA verified 01/22/86
CAS: 84-74-2	NOEL:	125	mg/kg/day		OPPADI:	0	base not reviewed by	
EPA Chem Code: 028001		0	ppm		RFD:	0.1	RfD/PR Committee.	
CASWELL: 292	LEL:	600	mg/kg/day		WHOADI:	0		
CFR:		0	ppm		QSTAR:	0		
CFR185:								On IRIS.
REG_GROUP:	LIST C	Cancer:		D (CRAVE)				
Dicamba (+ salts)	2gen reprod- rat			Significantly decreased	PADI	UF: 100	Data gaps will be deter-	HED reassess 06/03/88
CAS: 1918-00-9	NOEL:	45	mg/kg/day	pup growth in all	OPPADI:	0.45	mined by HED.	EPA verified 06/22/88
EPA Chem Code: 029801		500	ppm	tions & matings.	RFD:	0.03		RfD/PR reviewed
CASWELL: 295	LEL:	136	mg/kg/day		WHOADI:	0		RfD/PR reviewed
CFR: 180.227		1500	ppm		QSTAR:	0		RfD/PR reviewed
CFR185: 185.1800								On IRIS.
REG_GROUP:	LIST A (6A)	Cancer:		D (RfD/PR				
Dichlobenil	2yr feeding- dog			Incr absolute & relative	ADI	UF: 100	No data gaps.	HED reviewed 06/19/86
CAS: 1194-65-6	NOEL:	1.25	mg/kg/day	liver & thyroid wts;	OPPADI:	0.013		HED reconsider
EPA Chem Code: 027401		50	ppm	changes in clinical	RFD:	0		RfD/PR reviewed
CASWELL: 297	LEL:	8.75	mg/kg/day	istry.	WHOADI:	0		
CFR: 180.231		350	ppm	Chemical being	QSTAR:	0		
CFR185:				by HED Cancer Peer				
REG_GROUP:	LIST A (6C)	Cancer:		C (HED)				
Dichlofluanid					UF:			WHO reviewed 1983
CAS: 1085-98-9	NOEL:	0	mg/kg/day		OPPADI:	0		
EPA Chem Code: 128844		0	ppm		RFD:	0		
CASWELL: 297A	LEL:	0	mg/kg/day		WHOADI:	0.3		
CFR:		0	ppm		QSTAR:	0		
CFR185:								
REG GROUP:	Cancer:							

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CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Dichlofluanid-methyl CAS: 73102701 EPA Chem Code: 309200 CASWELL: 309AB CFR: CFR185: REG_GROUP:	NOEL: 0 mg/kg/day 0 ppm LEL: 0 mg/kg/day 0 ppm Cancer.		UF: OPPADI: 0 RFD: 0 WHOADI: 0.1 QSTAR: 0	[Syn. Tolylfluanid]W	WHO reviewed 1988
Dichlone CAS: 117-80-6 EPA Chem Code: 029601 CASWELL: 298 CFR: 180.118 CFR185: REG_GROUP:	2yr feeding-rat NOEL: 25 mg/kg/day 500 ppm LEL: 79 mg/kg/day 1580 ppm LIST A - Cancer.	Mild tubular nephrosis & focal infiltration of a chronic nature.	UF: 3000 OPPADI: 0.08 RFD: 0 WHOADI: 0 QSTAR: 0	Critical study and data base not reveiwed by RfD/PR Committee.	Ad Hoc Meeting
Dichlormid CAS: 37764-25-7 EPA Chem Code: CASWELL: 284A CFR: CFR185: REG_GROUP:	90d feeding-dog NOEL: 5 mg/kg/day 0 ppm LEL: 25 mg/kg/day 0 ppm Safener Cancer.	Significant decr body degeneration of muscle fibers & in clinical chemistry parameters.	PADI UF: 1000 OPPADI: 0.005 RFD: 0 WHOADI: 0 QSTAR: 0	Developmental tox - rat	RfD/PR reviewed
Dichlorobenzamide, 2,6- CAS: 2008-58-4 EPA Chem Code: 027402 CASWELL: 301D CFR: CFR185: REG_GROUP:	1yr feeding-dog NOEL: 4.5 mg/kg/day 180 ppm LEL: 12.5 mg/kg/day 500 ppm Cancer. Unclassifiable	Decreased body weight gain in M & F.	PADI UF: 300 OPPADI: 0.015 RFD: 0 WHOADI: 0 QSTAR: 0	Chronic feed/carcino- Chronic feeding - dog Reproduction-rat Developmental tox-rat [Syn. BAM]	RfD/PR reviewed
Dichlorodifluoromethane CAS: 75-71-8 EPA Chem Code: 000014 CASWELL: 304 CFR: CFR185: REG GROUP:	2yr feeding-rat NOEL: 15 mg/kg/day 300 ppm LEL: 150 mg/kg/day 3000 ppm LIST D Cancer. Undetermined.	Reduced body weight.	UF: 100 OPPADI: 0 RFD: 0.2 WHOADI: 0 QSTAR: 0	Critical study and data base not reviewed by RfD/PR Committee. On IRIS.	EPA verified 07/22/85 On IRIS.

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CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Dichlorophenol, 2,4-	90d feeding- rat	Decreased delayed	UF: 100	Critical study and data	EPA verified 01/22/86
CAS: 120-83-2	NOEL: 0.3 mg/kg/day	sensitivity response.	OPPADI: 0	base not reviewed by	
EPA Chem Code:	3 ppm		RFD: 0.003	RfD/PR Committee.	
CASWELL: 314C	LEL: 3 mg/kg/day		WHOADI: 0		
CFR:	30 ppm		QSTAR: 0		
CFR185:					On IRIS.
REG_GROUP:	Cancer.				
Dichloroprop (2,4-DP)	90d feeding- rat		PADI UF: 1000	Need data gaps.	Pending- HED to look at
CAS: 120-36-5	NOEL: 5 mg/kg/day		OPPADI: 0.005		2-yr rat study.
EPA Chem Code: 031401	100 ppm		RFD: 0		
CASWELL: 320	LEL: 25 mg/kg/day		WHOADI: 0		
CFR:	500 ppm		QSTAR: 0		
CFR185:					
REG_GROUP:	LIST A (6C) Cancer.				
Dichloropropene, 1,3	2yr feeding- rat	Decr body weight gain;	ADI UF: 100	No data gaps.	HED reviewed 05/22/86
CAS: 542-75-6	NOEL: 2.5 mg/kg/day	Incr incidence of basal	OPPADI: 0.025		EPA pending 08/19/86
EPA Chem Code: 029001	0 ppm	cell hyperplasia of the	RFD: 0.0003		HED reassess 03/20/87
CASWELL: 324A	LEL: 12.5 mg/kg/day	nonglandular mucosa of	WHOADI: 0	Q* Oral: 1.8E-1	EPA verified 04/15/87
CFR:	0 ppm	the stomach.	QSTAR: 0.18	Q* Inhalation: 5.33E-2	RfD/PR reviewed
CFR185:				[Syn. Telone II].	On IRIS.
REG_GROUP:	LIST A Cancer. B2 (HED)				
Dichlorvos (DDVP)	1yr feeding- dog	Plasma & RBC ChE	PADI UF: 100	Reproduction- rat	HED reviewed 07/16/87
CAS: 62-73-7	NOEL: 0.05 mg/kg/day	ion in M&F; Brain ChE in-	OPPADI: 0.0005	(Core-Supplementary)	EPA verified 07/16/87
EPA Chem Code: 084001	0 ppm	hibition in M.	RFD: 0.0005	Developmental tox-	RfD/PR reviewed
CASWELL: 328	LEL: 0.1 mg/kg/day	Evidence of	WHOADI: 0.004	LEL was derived using	EPA verified 05/27/92
CFR: 180.235	0 ppm	ity in rats (pancreas,	QSTAR: 0.122	chronic, 90-day, &	WHO reviewed 1993
CFR185: 185.1900		leuk.) & mice (stomach).		dog studies.	On IRIS.
REG_GROUP:	LIST A (3 SR) Cancer. C(q) (HED); C				
Diclofop-methyl (Hoelon)	15mo feeding- dog	Fatty liver changes.	ADI UF: 100	Chronic feed/carcino-	HED reviewed 10/24/86
CAS: 51338-27-3	NOEL: 0.2 mg/kg/day		OPPADI: 0.002	(repeat study)	
EPA Chem Code: 110902	8 ppm	Evidence of	RFD: 0		
CASWELL: 319A	LEL: 0.63 mg/kg/day	ity in mouse (liver),	WHOADI: 0		
CFR: 180.385	25 ppm	negative in the rat (in-	QSTAR: 0.23		
CFR185:		adequate doses).			
REG GROUP:	LIST B Cancer. C(q) (HED)				

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CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Dicloran (DCNA/Botran) CAS: 99-30-9 EPA Chem Code: 031301 CASWELL: 311 CFR: 180.200 CFR185: REG_GROUP:	2yr feeding- dog NOEL: 2.5 mg/kg/day 100 ppm LEL: 75 mg/kg/day 3000 ppm LIST A Cancer: Negative- 1	Increased liver weight, histological changes in hepatocytes. No evidence of enicity in rats.	ADI UF: 100 OPPADI: 0.025 RFD: 0 WHOADI: 0.03 QSTAR: 0	No data gaps. HED RfD pending: cance of liver findings at 100 ppm to be evaluated.	WHO reviewed 1977 HED pending 01/13/87
Dicofol (Kelthane) CAS: 115-32-2 EPA Chem Code: 010501 CASWELL: 093 CFR: 180.163 CFR185: 185.410 REG_GROUP:	1yr feeding- dog NOEL: 0.12 mg/kg/day 5 ppm LEL: 0.82 mg/kg/day 30 ppm LIST A (6A) Cancer: C (HED)	Inhibition of ACTH stimulated cortisol release in both males and	ADI UF: 100 OPPADI: 0.0012 RFD: 0 WHOADI: 0.002 QSTAR: 0	No data gaps	RfD/PR reviewed WHO reviewed 1992
Dicrotophos (Bidrin) CAS: 141-66-2 EPA Chem Code: 035201 CASWELL: 376 CFR: 180.299 CFR185: REG_GROUP:	3gen reprod- rat NOEL: 0.1 mg/kg/day 2 ppm LEL: 0.25 mg/kg/day 5 ppm LIST A (6A) Cancer: Insufficient data.	Decreased fertility in females, decreased pup viability. No valid data No valid data for carcinogenicity evaluation (all studies Supplementary).	PLD UF: 1000 OPPADI: 0.0001 RFD: 0.0001 WHOADI: 0 QSTAR: 0	Chronic feed/carcino- Chronic feeding- dog Reproduction- rat Developmental tox- 2 All studies	HED reviewed 04/16/86 EPA pending 08/19/86 EPA verified 09/02/86 On IRIS.
Dieldrin CAS: 60-57-1 EPA Chem Code: 045001 CASWELL: 333 CFR: 180.137 CFR185: REG_GROUP:	2yr feeding- rat NOEL: 0.005 mg/kg/day 0.1 ppm LEL: 0.05 mg/kg/day 1 ppm Cancer: B2 (CRAVE)	Enlarged liver. Histological changes seen at 10 ppm. Evidence of ity.	PADI UF: 100 OPPADI: 0.00005 RFD: 0.00005 WHOADI: 0.0001 QSTAR: 16	Reproduction- rat Developmental tox- 1 Oral Q*: 16 E +0 Inhalation Q*: 4.6 E -3	WHO reviewed 1977; for combined residue Aldrin. HED reviewed 04/15/87 EPA verified 04/15/87 On IRIS.
Diethatyl ethyl (Antor) CAS: 38727-55-8 EPA Chem Code: 279500 CASWELL: 179D CFR: 180.402 CFR185: REG GROUP:	2yr feeding- dog NOEL: 0 mg/kg/day 0 ppm LEL: 0.25 mg/kg/day 10 ppm LIST B Cancer: Negative- 2	Positive Coomb's test. No evidence of enicity in ratsor mice.	UF: 0 OPPADI: 0 RFD: 0 WHOADI: 0 QSTAR: 0	RfD determination post-poned - Pending review the significance of the Coomb's test.	HED reviewed 4/25/86 HED deferred 4/07/88

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CHEMICAL	STUDY TYPE		EFFECTS	REFERENCE DOSES		DATA GAPS/COMMENTS	STATUS
Difenoconazole (Dividend)	2yr feeding-rat		Reductions in	ADI UF:	100	No data gaps.	RfD/PR reviewed
CAS: 119446-68-3	NOEL:	0.96 mg/kg/day	body weight gains.	OPPADI:	0.01		
EPA Chem Code: 128847		20 ppm		RFD:	0		
CASWELL: 955	LEL:	24.12 mg/kg/day		WHOADI:	0		
CFR:		500 ppm	Evidence of	QSTAR:	0		
CFR185:			ity in mice (liver).				
REG_GROUP:	NewChemical	Cancer: C (HCPRC)					
Difenzoquat methyl sulfate	1yr feeding-dog		Decreased body weight	ADI UF:	100	No data gaps.	HED reviewed 10/24/86
CAS: 43222-48-6	NOEL:	20 mg/kg/day	gain in females.	OPPADI:	0.2		HED reassess 03/20/87
EPA Chem Code: 106401		0 ppm		RFD:	0.08		EPA verified 10/14/87
CASWELL: 363A	LEL:	30 mg/kg/day		WHOADI:	0		RfD/PR reviewed
CFR: 180.369		0 ppm	No evidence of	QSTAR:	0		RfD/PR reviewed
CFR185:			enicity in rats or mice.				On IRIS.
REG_GROUP:	LIST A (6C)	Cancer: E (RfD/PR					
Difethialone				UF:			
CAS: 104653-34-1	NOEL:	0 mg/kg/day		OPPADI:	0		
EPA Chem Code: 128967		0 ppm		RFD:	0		
CASWELL:	LEL:	0 mg/kg/day		WHOADI:	0		
CFR:		0 ppm		QSTAR:	0		
CFR185:							
REG_GROUP:	Newchemical	Cancer:					
Diflubenzuron (Dimilin)	1yr feeding-dog		Increases in met and	ADI UF:	100	No data gaps.	WHO reviewed 1985
CAS: 35367-38-5	NOEL:	2 mg/kg/day	hemoglobin. Doses	OPPADI:	0.02		HED reviewed 07/11/86
EPA Chem Code: 108201		0 ppm	by capsule.	RFD:	0.02	Q* rat: 2.6 E-1	EPA verified 08/05/86
CASWELL: 346A	LEL:	10 mg/kg/day		WHOADI:	0.02	Q* mouse: 3.9 E-2	RfD/PR reviewed
CFR: 180.377		0 ppm	No evidence of	QSTAR:	0		
CFR185:			enicity in rats or mice.				On IRIS.
REG_GROUP:	LIST A (6B)	Cancer: E (RfD/PR					
Dimethenamid (SAN 582H)	2yr feeding-rat		Parathyroid hyperplasia	ADI UF:	100	No data gaps.	RfD/PR reviewed
CAS: 87674-68-8	NOEL:	5.1 mg/kg/day	in M; Bile duct hyperpla-	OPPADI:	0.05		
EPA Chem Code: 129051		100 ppm	sia in F.	RFD:	0		
CASWELL: 195J	LEL:	36 mg/kg/day		WHOADI:	0		
CFR: 180.464		700 ppm	Evidence of	QSTAR:	0		
CFR185:			ity in rats (M: liver)				
REG GROUP:	Newchemical	Cancer: C (HCPRC)					

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CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Dimethipin (Harvade) CAS: 55290-64-7 EPA Chem Code: 118901 CASWELL: 472AA CFR: 180.406 CFR185: REG_GROUP:	2yr feeding-rat NOEL: 2 mg/kg/day 40 ppm LEL: 10 mg/kg/day 200 ppm LIST C Cancer. Tentative C (HED)	Increased absolute and relative liver weights.	ADI UF: 100 OPPADI: 0.02 RFD: 0.02 WHOADI: 0.02 QSTAR: 0	No data gaps.	HED reviewed 03/14/86 EPA verified 04/08/86 WHO reviewed 1988 HED reviewed 01/04/90 EPA verified 02/21/90 On IRIS.
Dimethoate CAS: 60-51-5 EPA Chem Code: 035001 CASWELL: 358 CFR: 180.204 CFR185: REG_GROUP:	2yr feeding-rat NOEL: 0.05 mg/kg/day 1 ppm LEL: 0.25 mg/kg/day 5 ppm LIST A (6A) Cancer. C (HED)	Brain ChE inhibition. Evidence of ity in rat (hemangioma, hemangiosarcoma); ive in mice.	ADI UF: 100 OPPADI: 0.0005 RFD: 0.0002 WHOADI: 0.01 QSTAR: 0	No data gaps.	WHO reviewed 1987 HED reassess 03/04/88 EPA verified 03/23/88 RfD/PR reviewed RfD/PR reviewed On IRIS.
Dimethoxane CAS: 828-00-2 EPA Chem Code: 001001 CASWELL: 363 CFR: CFR185: REG_GROUP:	NOEL: 0 mg/kg/day 0 ppm LEL: 0 mg/kg/day 0 ppm LIST C Cancer.		UF: OPPADI: 0 RFD: 0 WHOADI: 0 QSTAR: 0	Since this chemical is not intended for food uses & since chronic or life time exposure is an unlikely scenario, an was not established.	RfD/PR reviewed
Dimethrin CAS: 70-38-2 EPA Chem Code: 034101 CASWELL: 359 CFR: CFR185: REG_GROUP:	1yr feeding-rat NOEL: 300 mg/kg/day 0 ppm LEL: 600 mg/kg/day 20000 ppm Cancer. Undetermined.	Increased liver to body weight ratios. No carcinogenicity studies are available.	PLD UF: 1000 OPPADI: 0.3 RFD: 0 WHOADI: 0 QSTAR: 0	Chronic feed/carcino- Chronic feeding-dog Reproduction-rat Developmental tox-2 No food uses, discontinued.	WHO reviewed 1965; not established. HED complete 04/18/86 EPA deferred 07/08/86 OPP & ODW to clarify & LEL dose in
Dimethyl phthalate (DMP) CAS: 131-11-3 EPA Chem Code: 028002 CASWELL: 380 CFR: CFR185: REG GROUP:	NOEL: 0 mg/kg/day 0 ppm LEL: 0 mg/kg/day 0 ppm LIST C Cancer. D (CRAVE)		UF: OPPADI: 0 RFD: 0 WHOADI: 0 QSTAR: 0	Insufficient data for RfD determination. EPA verified as not verifiable.	EPA verified 02/16/94

OFFICE OF PESTICIDES PROGRAMS REFERENCE DOSE TRACKING REPORT

CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Dimethyldithiocarbamate (Na) CAS: 128-04-1 EPA Chem Code: 034804 CASWELL: 762 CFR: 180.152 CFR185: REG_GROUP:	Develop tox- rat NOEL: 2 mg/kg/day 0 ppm LEL: 20 mg/kg/day 0 ppm LIST B Cancer.	Decreased body wt nal); Decreased fetal wt & ossification (Dev tox).	UF: 100 OPPADI: 0.02 RFD: 0 WHOADI: 0 QSTAR: 0	Critical study and data base not reviewed by RfD/PR Committee.	Ad hoc meeting
Dimethyloxazolidine, 4,4- CAS: 51200-87-4 EPA Chem Code: 114801 CASWELL: 374AB CFR: CFR185: REG_GROUP:	NOEL: 0 mg/kg/day 0 ppm LEL: 0 mg/kg/day 0 ppm LIST C Cancer.		UF: OPPADI: 0 RFD: 0 WHOADI: 0 QSTAR: 0	Since this chemical is not intended for food uses & since chronic or life time exposure is an unlikely scenario, an was not established.	
Dinex (DNOCHP) CAS: 131-89-5 EPA Chem Code: 037501 CASWELL: 391 CFR: CFR185: REG_GROUP:	Human Oral Study NOEL: 0 mg/kg/day 0 ppm LEL: 2 mg/kg/day 0 ppm Cancer: No data available.	Cataract formation. Critical study used 2,4-DNP and 4,6-DNOC as material; structurally similar to Dinex.	PLD UF: 1000 OPPADI: 0.002 RFD: 0.002 WHOADI: 0 QSTAR: 0	Chronic feed/carcino- Chronic feeding- dog Reproduction- rat Developmental tox- 2 [Syn. 4,6-Dinitro-o-cyclohexylphenol]	EPA verified 12/15/87 HED concurs 12/15/87 On IRIS.
Dinitramine CAS: 29091-05-2 EPA Chem Code: 102301 CASWELL: 335C CFR: 180.327 CFR185: REG_GROUP:	NOEL: 0 mg/kg/day 0 ppm LEL: 0 mg/kg/day 0 ppm LIST B Cancer.		UF: 0 OPPADI: 0 RFD: 0 WHOADI: 0 QSTAR: 0		
Dinitrophenol-2,4 CAS: 51-28-5 EPA Chem Code: 037509 CASWELL: 392 CFR: CFR185: REG GROUP:	Human NOEL: 0 mg/kg/day 0 ppm LEL: 2 mg/kg/day 0 ppm LIST B Cancer. Negative	ORD review human from uses of 2,4-DNP which caused	UF: 1000 OPPADI: 0 RFD: 0.002 WHOADI: 0 QSTAR: 0		EPA verified 02/05/86 On IRIS.

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CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Dinocap (Karathane)	2yr feeding- dog	Ophthalmoscopic	ADI UF: 100	No data gaps.	WHO reviewed 1989
CAS: 39300-45-3	NOEL: 0.38 mg/kg/day	histologic retinal	OPPADI: 0.004		AD hoc meeting
EPA Chem Code: 036001	15 ppm	atrophy.	RFD: 0		RfD/PR meeting
CASWELL: 391D	LEL: 1.5 mg/kg/day		WHOADI: 0.001	Chemical referred to	
CFR: 180.341	60 ppm	No evidence of carcino-	QSTAR: 0	Developmental/Reproduc	
CFR185:		genicity in rats or mice.		ive Peer Review	
REG_GROUP:	LIST B Cancer: E (RfD/PR				
Dinoseb (+salts)	3gen reprod- rat	Decreased pup weight	PLD UF: 1000	Chronic feed/carcino-	EPA verified 07/22/85
CAS: 88-85-7	NOEL: 0 mg/kg/day	during lactation.	OPPADI: 0.001	Chronic feeding- dog	HED reviewed 09/26/86
EPA Chem Code: 037505	0 ppm	Evidence of	RFD: 0.001	Developmental tox- rat	EPA verified 12/09/86
CASWELL: 392DD	LEL: 1 mg/kg/day	ity (liver, females only)	WHOADI: 0	Developmental tox-	
CFR: 180.281	0 ppm	in mice, inadequate data	QSTAR: 0	Pending cancellation	
CFR185:		in rats.		hearings.	On IRIS.
REG_GROUP:	Cancer: C (HED)				
Dioxathion			UF: 0		WHO reviewed 1968
CAS: 78-34-2	NOEL: 0 mg/kg/day		OPPADI: 0		
EPA Chem Code: 037801	0 ppm		RFD: 0		
CASWELL: 393	LEL: 0 mg/kg/day		WHOADI: 0.0015		
CFR: 180.171	0 ppm		QSTAR: 0		
CFR185:					
REG_GROUP:	LIST A - Cancer.				
Diphacinone			UF:	Since this chemical is	RfD/PR reviewed
CAS: 82-66-6	NOEL: mg/kg/day		OPPADI:	not intended for food	
EPA Chem Code: 067701	ppm		RFD:	uses & since chronic or	
CASWELL: 394	LEL: mg/kg/day		WHOADI:	life time exposure is an	
CFR:	ppm		QSTAR:	unlikely scenario, an	
CFR185:				was not established.	
REG_GROUP:	Cancer.				
Diphenamid	2yr feeding- dog	Increased liver to body	PADI UF: 100	Developmental tox- rat	HED reviewed 04/18/86
CAS: 957-51-7	NOEL: 3 mg/kg/day	weight ratios, inflamma-	OPPADI: 0.03	Developmental tox-	HED reassess 03/06/87
EPA Chem Code: 036601	0 ppm	tory cell infiltrates in	RFD: 0.03	Other studies not core	EPA verified 03/18/87
CASWELL: 395	LEL: 10 mg/kg/day	liver.	WHOADI: 0	graded.	
CFR: 180.230	0 ppm	No evidence of	QSTAR: 0	RfD tentative pending	
CFR185:		enicity in rat.		Registration Standard.	On IRIS.
REG GROUP:	LIST A - Cancer.	Insufficient data.			

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CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Diphenylamine CAS: 122-39-4 EPA Chem Code: 038501 CASWELL: 398 CFR: 180.190 CFR185: REG_GROUP:	1yr feeding-dog NOEL: 0 mg/kg/day 0 ppm LEL: 10 mg/kg/day 0 ppm LIST B Cancer: Not determined	Possible methemoglobin effects.	ADI UF: 100 OPPADI: 0.03 RFD: 0.025 WHOADI: 0.02 QSTAR: 0	No data gaps. Additional UF of 3 used to account for lack of an established NOEL.	WHO reviewed 1984 HED reviewed 07/18/86 EPA verified 07/22/86 On IRIS.
Dipropetryn CAS: 4147-51-7 EPA Chem Code: 104401 CASWELL: 456AA CFR: 180.329 CFR185: REG_GROUP:	NOEL: 0 mg/kg/day 0 ppm LEL: 0 mg/kg/day 0 ppm LIST A - Cancer:		UF: 0 OPPADI: 0 RFD: 0 WHOADI: 0 QSTAR: 0		
Diquat dibromide CAS: 85-00-7 EPA Chem Code: 032201 CASWELL: 402 CFR: 180.226 CFR185: 185.2500 REG_GROUP:	1yr feeding-dog NOEL: 0.5 mg/kg/day 0 ppm LEL: 2.5 mg/kg/day 0 ppm LIST A (6B) Cancer: E (RfD/PR	Unilateral cataracts in F decr wt of adrenals & epididymides in M. No evidence of enicity in rats or mice.	ADI UF: 100 OPPADI: 0.005 RFD: 0.0022 WHOADI: 0.002008 QSTAR: 0	No data gaps. 2yr rat study is co-critical: NOEL=0.58 mg/kg; LEL=2.91 mg/kg (eye effects)	HED reviewed 05/23/86 EPA verified 07/22/86 WHO reviewed 1993 RfD/PR reviewed EPA deferred 12/09/94 On IRIS.
Disodium methanearsonate CAS: 144-21-8 EPA Chem Code: 013802 CASWELL: 405 CFR: 180.289 CFR185: REG_GROUP:	2yr feeding-rat NOEL: 3.2 mg/kg/day 0 ppm LEL: 27 mg/kg/day 0 ppm LIST B Cancer:	Acute inflammation, sal ulceration & perforations of the large intestine.	UF: 300 OPPADI: 0.01 RFD: 0 WHOADI: 0 QSTAR: 0	Critical study and data base not reviewed by RfD/PR Committee. Data base includes MSMA studies. [Syn. DSMA]	Ad hoc meeting
Disulfoton CAS: 298-04-4 EPA Chem Code: 032501 CASWELL: 341 CFR: 180.183 CFR185: REG GROUP:	6mn feeding-rat NOEL: 0.03 mg/kg/day 0.5 ppm LEL: 0.07 mg/kg/day 1 ppm LIST A (6B) Cancer: E (RfD/PR	Brain, plasma & erythrocyte ChE inhibition in females. No evidence of enicity in rats or mice.	ADI UF: 100 OPPADI: 0.0003 RFD: 0.00004 WHOADI: 0.0003 QSTAR: 0	No data gaps. 2-Yr Dog study co-critical with 0.05 mg/kg (Plasma and erythrocyte ChE inhibition).	HED reviewed 04/18/86 EPA verified 05/14/86 WHO reviewed 1991 RfD/PR reviewed On IRIS.

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CHEMICAL	STUDY TYPE		EFFECTS	REFERENCE DOSES		DATA GAPS/COMMENTS	STATUS
Dithianon				UF:			WHO reviewed 1992
CAS: 3347-22-6	NOEL:	0 mg/kg/day		OPPADI:	0		
EPA Chem Code: 099201		0 ppm		RFD:	0		
CASWELL: 349B	LEL:	0 mg/kg/day		WHOADI:	0.01		
CFR:		0 ppm		QSTAR:	0		
CFR185:							
REG_GROUP:	Cancer.						
Dithiopyr (MON 7200)	2yr feeding- rat		Liver and kidney toxicity	PADI UF:	100	No data gaps	RfD/PR reviewed
CAS: 97886-45-8	NOEL:	0.36 mg/kg/day		OPPADI:	0.0036		RfD/PR reviewed
EPA Chem Code: 128994		10 ppm		RFD:	0		HED Cancer PR
CASWELL: 717C	LEL:	3.63 mg/kg/day		WHOADI:	0		
CFR:		100 ppm	No evidence of	QSTAR:	0		
CFR185:			enicity in rats or mice.				
REG_GROUP:	Newchemical	Cancer. E (HED)					
Diuron	2yr feeding- rat		F: incr erythrocyte	ADI UF:	300	No data gaps.	HED reassess 03/06/87
CAS: 330-54-1	NOEL:	0 mg/kg/day	M: Incr hemosiderin in	OPPADI:	0.003		EPA verified 03/18/87
EPA Chem Code: 035505		0 ppm	spleen; incr spleen wt,	RFD:	0.002	Additional UF of 3 used	HED reassess 07/18/88
CASWELL: 410	LEL:	1.02 mg/kg/day	bone marrowactivation;	WHOADI:	0	to account for lack of an	EPA verified 07/20/88
CFR: 180.106		25 ppm	decr fat marrow;	QSTAR:	0	established NOEL in the	RfD/PR reviewed
CFR185:			ed urinary bladder wall			chronic rat study.	On IRIS.
REG_GROUP:	LIST A (6A)	Cancer. Referred to HCPRC					
Dodine acetate	1yr feeding- dog		Histological changes in	PADI UF:	300	Chronic feed/carcino-	WHO reviewed 1976
CAS: 2439-10-3	NOEL:	1.25 mg/kg/day	the thyroid.	OPPADI:	0.004	Chronic feeding- dog	HED reviewed 09/19/86
EPA Chem Code: 044301		50 ppm		RFD:	0.004	(Core-Supplementary)	HED reassess 03/06/87
CASWELL: 419	LEL:	5 mg/kg/day		WHOADI:	0.01	Developmental tox- 2	EPA verified 03/18/87
CFR: 180.172		200 ppm	Carcinogenicity studies	QSTAR:	0	Extra UF of 3 for data	
CFR185:			are inadequate.			gaps.	On IRIS.
REG_GROUP:	LIST A (6C)	Cancer. Insufficient data					
Dodine hydrochloride (DGH)				UF:			
CAS: 13590-97-1	NOEL:	0 mg/kg/day		OPPADI:	0		
EPA Chem Code: 044303		0 ppm		RFD:	0		
CASWELL: 418A	LEL:	0 mg/kg/day		WHOADI:	0		
CFR:		0 ppm		QSTAR:	0		
CFR185:							
REG GROUP:	LIST A	Cancer.					

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CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Dowicil			UF:	Since this chemical is	RfD/PR reviewed
CAS: 4080-31-3	NOEL: 0 mg/kg/day		OPPADI: 0	not intended for food	
EPA Chem Code: 017901	0 ppm		RFD: 0	uses & since chronic or	
CASWELL: 181	LEL: 0 mg/kg/day		WHOADI: 0	life time exposure is an	
CFR:	0 ppm		QSTAR: 0	unlikely scenario, an	
CFR185:				was not established.	
REG_GROUP:	LIST C Cancer.				
EPN (ESA, MAPJ)	90d neurotox- hen	Organophosphate-type	PADI UF: 1000	All tolerances revoked	HED reviewed 10/24/86
CAS: 2104-64-5	NOEL: 0.01 mg/kg/day	delayed neurotoxicity.	OPPADI: 0.00001	1993.	HED reassess 03/06/87
EPA Chem Code: 041801	0 ppm	ataxia, histological	RFD: 0.00001	Chronic feed/carcino-	EPA verified 03/18/87
CASWELL: 454	LEL: 0.1 mg/kg/day	damage to nerves at	WHOADI: 0	Chronic feeding- dog	
CFR: 180.119	0 ppm	er doses. No	QSTAR: 0	Reproduction- rat	
CFR185:		city data available.		Developmental tox- 2	On IRIS.
REG_GROUP:	LIST A - Cancer. Undetermined.				
EPTC (Eptam)	2gen reprod- rat	Degenerative myopathy	PADI UF: 100	Developmental tox-	HED reviewed 08/08/86
CAS: 759-94-4	NOEL: 2.5 mg/kg/day	parental rats.	OPPADI: 0.025	(Core-Supplementary)	EPA verified 10/28/86
EPA Chem Code: 041401	50 ppm	pup weights at 800	RFD: 0.025		HED reassess 03/17/87
CASWELL: 435	LEL: 10 mg/kg/day		WHOADI: 0		EPA verified 05/20/87
CFR: 180.117	200 ppm	No evidence of	QSTAR: 0		
CFR185:		enicity in rats or mice.			On IRIS.
REG_GROUP:	LIST A (6A) Cancer. Negative- 2				
Ebufos (Cadusafos/Apache)	1yr feeding- dog	Depressed plasma ChE	PADI UF: 100	No data gaps.	HED reviewed 03/29/90
CAS: 95465-99-9	NOEL: 0.001 mg/kg/day	ivity in females.	OPPADI: 0.00001		EPA deferred 08/22/90
EPA Chem Code: 128864	0 ppm		RFD: 0.00001		RfD/PR reviewed
CASWELL: 431D	LEL: 0.005 mg/kg/day		WHOADI: 0.00003		RfD/PR reviewed
CFR: 180.461	0 ppm	No evidence of carcino-	QSTAR: 0		WHO reviewed 1991
CFR185:		genicity in rats or mice.			EPA verified 03/24/92
REG_GROUP:	Newchemical Cancer. E (RfD/PR				
Edifenphos			UF:		WHO reviewed 1981
CAS: 17109-49-8	NOEL: 0 mg/kg/day		OPPADI: 0		
EPA Chem Code: 434300	0 ppm		RFD: 0		
CASWELL: 434B	LEL: 0 mg/kg/day		WHOADI: 0.003		
CFR:	0 ppm		QSTAR: 0		
CFR185:					
REG GROUP:	Cancer.				

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CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Endosulfan	2yr feeding- rat	Decr body wt gain M&F;	PADI UF: 100	Developmental tox- rat	WHO reviewed 1989
CAS: 115-29-7	NOEL: 0.6 mg/kg/day	incr incidence of	OPPADI: 0.006	(core supplementary)	RfD/PR reviewed
EPA Chem Code: 079401	15 ppm	ssive	RFD: 0.006	1yr dog co-principal -	RfD/PR reviewed
CASWELL: 420	LEL: 2.9 mg/kg/day	& blood vessel	WHOADI: 0.006	NOEL=0.57 mg/kg;	EPA reviewed 11/04/92
CFR: 180.182	75 ppm	in M; No evidence of	QSTAR: 0	mg/kg (decr wt gains M;	RfD/PR reviewed
CFR185: 185.2600		cinogenicity in rats/mice		neurologic findings M&F	EPA verified 03/31/93
REG_GROUP:	LIST A (6A) Cancer: E				
Endothall	2yr feeding- dog	Increased absolute and	PADI UF: 100	Chronic feed/carcino-	HED reviewed 04/18/86
CAS: 145-73-3	NOEL: 2 mg/kg/day	relative weight of sto-	OPPADI: 0.02	Dog most sensitive	HED reassess 11/24/86
EPA Chem Code: 038901	100 ppm	mach and small	RFD: 0.02	species- additional UF	EPA verified 11/25/86
CASWELL: 421	LEL: 6 mg/kg/day	Doses on basis of ion.	WHOADI: 0	not needed for data	
CFR: 180.293	300 ppm	No adequate	QSTAR: 0		
CFR185: 185.2650		ity data available.			On IRIS.
REG_GROUP:	LIST B Cancer:	Insufficient data.			
Endrin	Chronic feeding-	Mild histological lesions	PADI UF: 100	All tolerances revoked	WHO reviewed 1970
CAS: 72-20-8	NOEL: 0.025 mg/kg/day	in liver, occasional con-	OPPADI: 0.0003	1993.	EPA verified 04/21/88
EPA Chem Code: 041601	1 ppm	vulsions.	RFD: 0.0003		HED concurs 04/21/88
CASWELL: 423	LEL: 0.05 mg/kg/day		WHOADI: 0.0002	Endrin has been	
CFR: 180.131	2 ppm		QSTAR: 0	ily withdraen from the	
CFR185:				U.S. market.	On IRIS.
REG_GROUP:	LIST B Cancer:	D (CRAVE)			
Esfenvalerate (Asana)	Develop tox- rat	Behavioral/CNS clinical	ADI UF: 100	Data gaps to be	RfD/PR reviewed
CAS: 66230-04-4	NOEL: 2 mg/kg/day	signs.	OPPADI: 0.02	ed.	
EPA Chem Code: 109303	0 ppm		RFD: 0		
CASWELL: 268J	LEL: 2.5 mg/kg/day		WHOADI: 0	Data from Fenvalerate	
CFR:	0 ppm	No evidence of	QSTAR: 0	used in this	
CFR185:		enicity in rats or mice.			
REG_GROUP:	Newchemical Cancer:	E (RfD/PR			
Ethalfluralin (Sonalan)	1yr feeding- dog	Doses given by	ADI UF: 100	No data gaps.	HED reviewed 11/19/86
CAS: 55283-68-6	NOEL: 4 mg/kg/day	Altered red cell morpho-	OPPADI: 0.04		RfD/PR reviewed
EPA Chem Code: 113101	0 ppm	logy, increased urinary	RFD: 0		
CASWELL: 453B	LEL: 20 mg/kg/day	bilirubin. Evidence of	WHOADI: 0		
CFR: 180.416	0 ppm	carcinogenicity in rats	QSTAR: 0.089		
CFR185:		mammary); neg. in mice.			
REG GROUP:	LIST B Cancer:	C(q) (HCPRC)			

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CHEMICAL	STUDY TYPE		EFFECTS	REFERENCE DOSES		DATA GAPS/COMMENTS	STATUS
Ethephon	Human 28 day		Diarrhea, urgency of	ADI UF:	100	No data gaps.	HED reviewed 03/08/88
CAS: 16672-87-0	NOEL:	0 mg/kg/day	el movements, urinary	OPPADI:	0.018		EPA verified 03/23/88
EPA Chem Code: 099801		0 ppm	urgency, stomach	RFD:	0.005	An Ad Hoc group meet	WHO reviewed 1993
CASWELL: 426A	LEL:	1.8 mg/kg/day	decr or incr in appetite.	WHOADI:	0.05	5/24/95 to resolve the	RfD/PR reviewed
CFR: 180.300		0 ppm		QSTAR:	0	carcinogenicity classifi-	Ad Hoc Group 05/24/95
CFR185: 185.2700						cation.	On IRIS.
REG_GROUP:	LIST A (6C)	Cancer: D (RfD/PR					
Ethidimuron (Ustilan)				UF:	0		WHO reviewed 1982
CAS: 30043-49-3	NOEL:	0 mg/kg/day		OPPADI:	0		
EPA Chem Code: 122501		0 ppm		RFD:	0		
CASWELL: 902C	LEL:	0 mg/kg/day		WHOADI:	0.1		
CFR:		0 ppm		QSTAR:	0		
CFR185:							
REG_GROUP:	Cancer:						
Ethiofencarb (Croneton)				UF:			
CAS: 29973-13-5	NOEL:	0 mg/kg/day		OPPADI:	0		
EPA Chem Code: 112101		0 ppm		RFD:	0		
CASWELL: 263AA	LEL:	0 mg/kg/day		WHOADI:	0		
CFR:		0 ppm		QSTAR:	0		
CFR185:							
REG_GROUP:	Cancer:						
Ethiolate				UF:	0		
CAS: 2941-55-1	NOEL:	0 mg/kg/day		OPPADI:	0		
EPA Chem Code: 103701		0 ppm		RFD:	0		
CASWELL: 434AA	LEL:	0 mg/kg/day		WHOADI:	0		
CFR: 180.343		0 ppm		QSTAR:	0		
CFR185:							
REG_GROUP:	Cancer:						
Ethion	Human 21d Oral		Decreased plasma ChE	ADI UF:	100	UF of 100 - 10 for intra-	EPA verified 05/17/89
CAS: 563-12-2	NOEL:	0 mg/kg/day	clinical signs.	OPPADI:	0.0005	species variability & 10	WHO reviewed 1990
EPA Chem Code: 058401		0 ppm		RFD:	0.0005	for lack of NOEL & brain	RfD/PR reviewed
CASWELL: 427	LEL:	0.05 mg/kg/day		WHOADI:	0.002	Che inhibition preceeded	RfD/PR reviewed
CFR: 180.173		0 ppm	No evidence of	QSTAR:	0	blood ChE inhibition in	RfD/PR reviewed
CFR185: 185.2750			enicity in rats or mice.			the dermal rabbit study.	On IRIS.
REG GROUP:	LIST A (5	Cancer: E (RfD/PR					

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CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Ethiozin (Ebuzin/Tycor) CAS: 64529-56-2 EPA Chem Code: 128883 CASWELL: 033L CFR: CFR185: REG_GROUP:	2yr feeding- rat NOEL: 5 mg/kg/day 100 ppm LEL: 400 mg/kg/day 20 ppm Cancer: Tentative C (HED)	Diffuse follicular hyper- plasia of the thyroid; tendency towards Evidence of ity in rats (thyoid); negative for mice	ADI UF: 100 OPPADI: 0.05 RFD: 0 WHOADI: 0 QSTAR: 0	No data gaps.	HED reviewed 03/01/90 EPA deferred 03/21/90 (OPP to reevaluate T4 levels in critical study)
Ethirimol CAS: 23947-60-6 EPA Chem Code: 228900 CASWELL: 128H CFR: CFR185: REG_GROUP:	3gen reprod- rat NOEL: 5 mg/kg/day 100 ppm LEL: 25 mg/kg/day 500 ppm Cancer:		PADI UF: 100 OPPADI: 0.05 RFD: 0 WHOADI: 0 QSTAR: 0	Critical study and data base not reviewed by RfD/PR Committee.	
Ethofenprox (Etofenprox) CAS: 80844-07-1 EPA Chem Code: 128965 CASWELL: 427M CFR: CFR185: REG_GROUP:	2gen reprod- rat NOEL: 5 mg/kg/day 100 ppm LEL: 35 mg/kg/day 700 ppm Newchemical Cancer: C(q) (HED)	Increase in pup liver weights at weaning. Evidence of ity in F rats (thyroid).	PADI UF: 100 OPPADI: 0.05 RFD: 0 WHOADI: 0.03 QSTAR: 0.0051	Developmental tox- (Core supplementary)	RfD/PR reviewed RfD/PR reviewed WHO reviewed 1993
Ethofumesate CAS: 26225-79-6 EPA Chem Code: 110601 CASWELL: 427BB CFR: 180.345 CFR185: REG_GROUP:	2yr feeding- rat NOEL: 37.6 mg/kg/day 1000 ppm LEL: 207 mg/kg/day 5000 ppm LIST B Cancer: D (RfD/PR	Reduced body wt gain F; relative liver wt incr M; incr in mortality (M). No evidence of enicity in rats.	PADI UF: 100 OPPADI: 0.4 RFD: 0 WHOADI: 0 QSTAR: 0	Carcinogenicity- mouse A rat carcinogenicity study may be requested pending submission of additional data on curr- ent rat study.	RfD/PR reviewed
Ethoprop (Ethoprophos) CAS: 13194-48-4 EPA Chem Code: 041101 CASWELL: 434C CFR: 180.262 CFR185: REG GROUP:	1yr & 5mn feed- NOEL: 0.01 mg/kg/day 0 ppm LEL: 0.025 mg/kg/day 0 ppm LIST A (4 Cancer: Referred to HCPRC	Plasma ChE inhibition.	ADI UF: 100 OPPADI: 0.0001 RFD: 0 WHOADI: 0.0003 QSTAR: 0	Carcinogenicity- mouse (study maybe	HED complete 11/03/86 WHO reviewed 1987 RfD/PR reviewed

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CHEMICAL	STUDY TYPE		EFFECTS	REFERENCE DOSES		DATA GAPS/COMMENTS	STATUS
Ethoxyquin	1yr feeding- dog		Impaired liver function.	UF:	100	Critical study and data	WHO reviewed 1969
CAS: 91-53-2	NOEL:	3 mg/kg/day		OPPADI:	0.03	base not reviewed by	AD hoc meeting
EPA Chem Code: 055501		0 ppm		RFD:	0	RfD/PR Committee.	
CASWELL: 427D	LEL:	10 mg/kg/day		WHOADI:	0.06		
CFR: 180.178		0 ppm		QSTAR:	0		
CFR185:							
REG_GROUP:	LIST A (6A)	Cancer.					
Ethyl formate				UF:		Insufficient data for RfD	Ad hoc meeting
CAS: 109-94-4	NOEL:	0 mg/kg/day		OPPADI:	0	derivation.	
EPA Chem Code: 043102		0 ppm		RFD:	0		
CASWELL: 443A	LEL:	0 mg/kg/day		WHOADI:	0	CFR 185.2900 - Ethyl	
CFR:		0 ppm		QSTAR:	0	mat is a food additive.	
CFR185: 185.2900							
REG_GROUP:	Cancer.						
Ethylan (Perthane)				UF:	0		
CAS: 72-56-0	NOEL:	0 mg/kg/day		OPPADI:	0		
EPA Chem Code: 032101		0 ppm		RFD:	0		
CASWELL: 337	LEL:	0 mg/kg/day		WHOADI:	0		
CFR: 180.139		0 ppm		QSTAR:	0		
CFR185:							
REG_GROUP:	LIST B	Cancer.					
Ethylene dibromide (EDB)				UF:	0	All tolerances revoked	WHO reviewed 1966;
CAS: 106-93-4	NOEL:	0 mg/kg/day		OPPADI:	0	1993.	for bromine ion.
EPA Chem Code: 042002		0 ppm		RFD:	0		from all sources.
CASWELL: 439	LEL:	0 mg/kg/day		WHOADI:	1	Oral Q*: 67 E +0	
CFR: 180.397		0 ppm		QSTAR:	67	Inhalation Q*: 1.4 E +0	
CFR185:						Syn. 1,2-Dibromoethane	
REG_GROUP:	LIST B	Cancer.	B2 (ORD); 2A				
Ethylene dichloride (EDC)				UF:			WHO reviewed 1965;
CAS: 107-06-2	NOEL:	0 mg/kg/day		OPPADI:	0		not established.
EPA Chem Code: 042003		0 ppm		RFD:	0		
CASWELL: 440	LEL:	0 mg/kg/day		WHOADI:	0		
CFR:		0 ppm		QSTAR:	0		
CFR185:						[Syn.	
REG GROUP:	Cancer.						

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CHEMICAL	STUDY TYPE		EFFECTS	REFERENCE DOSES			DATA GAPS/COMMENTS	STATUS
Ethylene oxide				UF:	0			WHO reviewed 1968;
CAS: 75-21-8	NOEL:	0 mg/kg/day		OPPADI:	0			not established.
EPA Chem Code: 042301		0 ppm		RFD:	0			
CASWELL: 443	LEL:	0 mg/kg/day		WHOADI:	0			
CFR: 180.151		0 ppm		QSTAR:	0			
CFR185: 185.2850								
REG_GROUP:	LIST B Cancer:	1 IARC						
Ethylene thiourea (ETU)	2yr feeding-rat		Increased incidence of	PADI	UF:	3000	Reproduction-rat	EPA verified 12/09/86
CAS: 96-45-7	NOEL:	0 mg/kg/day	thyroid hyperplasia.	OPPADI:		0.00008	Chronic feeding-dog	HED reassess 10/30/87
EPA Chem Code: 600016		0 ppm		RFD:		0.00008	UF 3000 for data gaps,	EPA deferred 02/25/88
CASWELL: 443AA	LEL:	0.25 mg/kg/day	Evidence of	WHOADI:		0.004	lack of NOEL.	EPA verified 02/20/91
CFR:		5 ppm	ity in rats (thyroid) &	QSTAR:		0.06		WHO reviewed 1993
CFR185:			& mice (liver).				EBDC plant metabolite.	On IRIS.
REG_GROUP:	Cancer: B2 (HCPRC/SAP)							
Etrimfos				UF:	0			WHO reviewed 1986
CAS: 38260-54-7	NOEL:	0 mg/kg/day		OPPADI:	0			
EPA Chem Code: 427500		0 ppm		RFD:	0			
CASWELL: 365AAA	LEL:	0 mg/kg/day		WHOADI:	0.003			
CFR:		0 ppm		QSTAR:	0			
CFR185:								
REG_GROUP:	Cancer:							
Famphur	90d feeding-rat		Inhibition of RBC ChE.	PLD	UF:	100	Chronic feed/carcino-	HED reviewed 05/23/86
CAS: 52-85-7	NOEL:	0.05 mg/kg/day		OPPADI:		0.0005	Chronic feeding-dog	EPA deferred 06/24/86
EPA Chem Code: 059901		1 ppm		RFD:		0	Reproduction-rat	Pending RAC approval
CASWELL: 456D	LEL:	0.15 mg/kg/day		WHOADI:		0	Developmental tox-rat	RAF ChE report.
CFR: 180.233		3 ppm	No carcinogenicity data	QSTAR:		0	Developmental tox-	
CFR185:			are available.					
REG_GROUP:	LIST D Cancer:	Undetermined.						
Fenaminosulf (Diazoben)				UF:	0			
CAS: 140-56-7	NOEL:	0 mg/kg/day		OPPADI:	0			
EPA Chem Code: 034201		0 ppm		RFD:	0			
CASWELL: 359B	LEL:	0 mg/kg/day		WHOADI:	0			
CFR:		0 ppm		QSTAR:	0			
CFR185:								
REG GROUP:	LIST A -	Cancer.						

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CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Fenamiphos (Nemacur) CAS: 22224-92-6 EPA Chem Code: 100601 CASWELL: 453A CFR: 180.349 CFR185: 185.2950 REG_GROUP:	1yr feeding - dog NOEL: 0.01 mg/kg/day 0.5 ppm LEL: 0.03 mg/kg/day 1 ppm LIST A (6C) Cancer: E (RfD/PR	Plasma ChE inhibition No evidence of enicity in rats or mice.	PADI UF: 100 OPPADI: 0.0001 RFD: 0.00025 WHOADI: 0.0005 QSTAR: 0	Chronic feeding-dog (current study may be graded)	HED reviewed 03/21/86 EPA verified 12/09/86 WHO reviewed 1987 HED reviewed 07/01/88 RfD/PR reviewed On IRIS.
Fenarimol CAS: 60168-88-9 EPA Chem Code: 206600 CASWELL: 207AA CFR: 180.421 CFR185: 185.3200 REG_GROUP:	2yr feeding - rat NOEL: 6.5 mg/kg/day 130 ppm LEL: 17.5 mg/kg/day 350 ppm Cancer: E (HCPRC)	Fatty change in the liver. No evidence of enicity in rats or mice.	ADI UF: 100 OPPADI: 0.065 RFD: 0 WHOADI: 0 QSTAR: 0	No data gaps. RfD per Fed. Reg. notice of 10/30/86 (Vol pp. 39660).	HED reviewed 07/31/87 (per FR notice).
Fenbuconazole (Fenethanil) CAS: 114369-43-6 EPA Chem Code: 129011 CASWELL: 723Q CFR: CFR185: REG_GROUP:	2yr feeding - rat NOEL: 3.03 mg/kg/day 80 ppm LEL: 30.62 mg/kg/day 800 ppm Newchemical Cancer: C(q) (HCPRC)	Decr body wts (F), incr liver wts with centrilobular to midzonal hepatocellular enlargment & vacuolation (M&F).	PADI UF: 100 OPPADI: 0.03 RFD: 0 WHOADI: 0 QSTAR: 0.0106	Developmental tox-(current study maybe graded)	RfD/PR reviewed RfD/PR reviewed
Fenbutatin oxide (Vendex) CAS: 13356-08-6 EPA Chem Code: 104601 CASWELL: 481DD CFR: 180.362 CFR185: 185.3550 REG_GROUP:	2-gen reprod- rat NOEL: 5.2 mg/kg/day 75 ppm LEL: 17.4 mg/kg/day 250 ppm LIST A (6C) Cancer: E (RfD/PR	Reduced body wt & intake; reduced pup wt during lactation. Chronic rat & dog are co-principal.	PADI UF: 100 OPPADI: 0.05 RFD: 0 WHOADI: 0.03 QSTAR: 0	Chronic feeding- dog (core supplementary) [Syn. Hexakis]	RfD/PR reviewed WHO reviewed 1992
Fenitrothion (Sumithion) CAS: 122-14-5 EPA Chem Code: 105901 CASWELL: 373 CFR: CFR185: 185.2200 REG GROUP:	1yr feeding- dog NOEL: 0.125 mg/kg/day 5 ppm LEL: 0.25 mg/kg/day 10 ppm LIST A (6C) Cancer: E (RfD/PR	Plasma ChE inhibition; lymph node hemorrhage No evidence of enicity in rats or mice.	ADI UF: 100 OPPADI: 0.0013 RFD: 0 WHOADI: 0.005 QSTAR: 0	No data gaps. CFR No. 185.2200	HED reviewed 06/19/87 EPA postponed WHO reviewed 1988 RfD/PR reviewed

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CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Fenoxaprop-ethyl (Whip) CAS: 66441-23-4 EPA Chem Code: 128701 CASWELL: 431C CFR: 180.430 CFR185: REG_GROUP:	2gen reprod- rat NOEL: 0.25 mg/kg/day 5 ppm LEL: 1.5 mg/kg/day 30 ppm Cancer: Negative- 2	Decreased total blood lipids and cholesterol in F1. No evidence of enicity in rats or mice.	PADI UF: 100 OPPADI: 0.0025 RFD: 0 WHOADI: 0 QSTAR: 0	Developmental tox- (Study supplementary - maybe upgraded) Chronic feed/Onco-	HED reviewed 12/12/86 EPA deferred 09/16/87
Fenoxycarb CAS: 72490-01-8 EPA Chem Code: 125301 CASWELL: 652C CFR: CFR185: REG_GROUP:	2yr feeding- rat NOEL: 8.1 mg/kg/day 200 ppm LEL: 24.7 mg/kg/day 600 ppm Newchemical Cancer: B2 (HCPRC)	Non-neoplastic liver histology in males. Referred to HED enicity Peer Review	ADI UF: 100 OPPADI: 0.08 RFD: 0 WHOADI: 0 QSTAR: 0	No data gaps.	RfD/PR reviewed
Fenpropathrin (Danitol) CAS: 39515-41-8 EPA Chem Code: 127901 CASWELL: 273H CFR: 180.466 CFR185: 185.3225 REG_GROUP:	1yr feeding- dog NOEL: 2.5 mg/kg/day 100 ppm LEL: 6.25 mg/kg/day 250 ppm NewChemical Cancer: E (RfD/PR	Tremors. No evidence of enicity in rats or mice.	ADI UF: 100 OPPADI: 0.025 RFD: 0.025 WHOADI: 0.03 QSTAR: 0	No data gaps.	EPA verified 06/10/86 HED reviewed 10/05/88 RfD/PR reviewed EPA verified 04/01/93 WHO reviewed 1993 On IRIS.
Fenpyroximate CAS: 134098-61-6 EPA Chem Code: 129131 CASWELL: CFR: CFR185: REG_GROUP:	2yr feeding- rat NOEL: 0.97 mg/kg/day 25 ppm LEL: 3.08 mg/kg/day 75 ppm Newchemical Cancer: Not likely (RFDC)	Decreased body weight gain. No evidence of enicity in rats or mice.	ADI UF: 100 OPPADI: 0.01 RFD: WHOADI: QSTAR:	No data gaps.	RfD/PR reviewed
Ferridazon CAS: 83588-43-6 EPA Chem Code: 119001 CASWELL: 723J CFR: 180.423 CFR185: REG GROUP:	3gen reprod- rat NOEL: 5 mg/kg/day 100 ppm LEL: 45 mg/kg/day 900 ppm Cancer:	Decreased body	UF: 100 OPPADI: 0.05 RFD: 0 WHOADI: 0 QSTAR: 0	Critical study and data base not reviewed by RfD/PR Committee.	Ad hoc meeting

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CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Fensulfothion CAS: 115-90-2 EPA Chem Code: 032701 CASWELL: 343 CFR: 180.234 CFR185: REG_GROUP:	1yr feeding- dog NOEL: 0.025 mg/kg/day 1 ppm LEL: 0.05 mg/kg/day 2 ppm LIST A - Cancer.	Plasma and RBC ChE ition.	UF: 100 OPPADI: 0.00025 RFD: 0 WHOADI: 0.0003 QSTAR: 0	Critical study and data base not reveiwed by RfD/PR Committee.	WHO reviewed 1982 Ad hoc meeting
Ferthion CAS: 55-38-9 EPA Chem Code: 053301 CASWELL: 456F CFR: 180.214 CFR185: REG_GROUP:	Human ChE Study NOEL: 0 mg/kg/day 0 ppm LEL: 0.02 mg/kg/day 0 ppm LIST A (6C) Cancer. E (RfD/PR	Threshold effect for plasma ChE inhibition. No evidence of enicity in rats or mice.	ADI UF: 30 OPPADI: 0.0007 RFD: 0 WHOADI: 0.001 QSTAR: 0	No data gaps. Critical study supported by the special ChE study & the chronic rat mouse studies.	WHO reviewed 1980 HED reviewed 06/19/87 AD hoc meeting RfD/PR reviewed RfD/PR reviewed RfD/PR reviewed
Fenvalerate (Pydrin) CAS: 51630-58-1 EPA Chem Code: 109301 CASWELL: 077A CFR: 180.379 CFR185: 185.1300 REG_GROUP:	13wk feeding- rat NOEL: 2.5 mg/kg/day 50 ppm LEL: 7.5 mg/kg/day 150 ppm LIST B Cancer. E (RFD/PR	Neurological No evidence of enicity in rats or mice.	ADI UF: 100 OPPADI: 0.025 RFD: 0.025 WHOADI: 0.02 QSTAR: 0	All food uses for erate have or will be transferred to Esfenvalerate. Fenvalerate data will be used in the Esfenvalerate	WHO reviewed 1986 HED reviewed 08/15/86 EPA verified 09/16/86 HED reviewed 11/14/88 RfD/PR reviewed On IRIS.
Ferbam CAS: 14484-64-1 EPA Chem Code: 034801 CASWELL: 458 CFR: 180.114 CFR185: REG_GROUP:	NOEL: 0 mg/kg/day 0 ppm LEL: 0 mg/kg/day 0 ppm LIST B Cancer.		UF: 0 OPPADI: 0 RFD: 0 WHOADI: 0.02 QSTAR: 0	Insufficient data for RfD derivation.	WHO reviewed 1980 Ad hoc meeting
Fipronil CAS: 120068-37-3 EPA Chem Code: 129121 CASWELL: CFR: CFR185: REG GROUP:	2yr feeding- rat NOEL: 0.019 mg/kg/day 0.5 ppm LEL: 0.059 mg/kg/day 1.5 ppm Newchemical Cancer. C (HCPRC)	Incr incidence of clinical signs & alterations in clinical chemistry & thyroid parameters. Evidence of ity in rats (thyroid).	ADI UF: 100 OPPADI: 0.0002 RFD: 0 WHOADI: 0 QSTAR: 0	No data gaps.	RfD/PR reviewed

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CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Fluazifop-butyl (Fusilade)	2yr feeding-rat	Decreased survival.	ADI UF: 100	No data gaps.	HED reviewed 07/18/86
CAS: 69806-50-4	NOEL: 1 mg/kg/day	adjusted to target dose	OPPADI: 0.01		EPA deferred 08/19/86
EPA Chem Code: 122805	0 ppm	levels.	RFD: 0.01		RfD/PR reviewed
CASWELL: 460C	LEL: 3 mg/kg/day		WHOADI: 0		
CFR: 180.411	0 ppm	Carcinogenicity classifi-	QSTAR: 0		
CFR185: 185.3250		cation pending.			
REG_GROUP:	LIST B Cancer. Deferred				
Fluazinam	90d feeding-rat	Periacinar hepatocellular	PADI UF: 1000	Chronic feeding-rat	RfD PR reviewed
CAS: 79622-59-6	NOEL: 3.8 mg/kg/day	hypertrophy &	OPPADI: 0.004	Chronic feeding-dog	
EPA Chem Code: 129098	50 ppm	chronic inflammation in	RFD: 0	Reproduction-rat	
CASWELL:	LEL: 38 mg/kg/day	Incr in absoulte & relat-	WHOADI: 0	Developmental tox-	
CFR:	500 ppm	ive liver wts (M); lung &	QSTAR: 0	(current study was	
CFR185:		uterus wts (F)		graded to	
REG_GROUP:	Newchemical Cancer.				
Fluchloralin			UF: 0		
CAS: 33245-39-5	NOEL: 0 mg/kg/day		OPPADI: 0		
EPA Chem Code: 108701	0 ppm		RFD: 0		
CASWELL: 460B	LEL: 0 mg/kg/day		WHOADI: 0		
CFR: 180.363	0 ppm		QSTAR: 0		
CFR185:					
REG_GROUP:	LIST A - Cancer.				
Flucythrinate (Payoff)			UF: 0	Tolerances are being	WHO reviewed 1985
CAS: 70124-77-5	NOEL: 0 mg/kg/day		OPPADI: 0	revoked.	Ad hoc meeting
EPA Chem Code: 118301	0 ppm		RFD: 0		
CASWELL: 002AA	LEL: 0 mg/kg/day		WHOADI: 0.02		
CFR: 180.400	0 ppm		QSTAR: 0		
CFR185: 185.3300					
REG_GROUP:	LIST B Cancer.				
Fludioxonil (Maxim)	1yr feeding-dog	Decr body wt gain for	ADI UF: 100	No data gaps.	RfD/PR reviewed
CAS: 131341-86-1	NOEL: 3.3 mg/kg/day	1-13 & 1-52 for females.	OPPADI: 0.03		
EPA Chem Code: 071503	100 ppm		RFD: 0		
CASWELL:	LEL: 35.5 mg/kg/day		WHOADI: 0		
CFR:	1000 ppm		QSTAR: 0		
CFR185:					
REG GROUP:	Newchemical Cancer. D (HCPRC)				

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CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Flumetsulam (XRD-498) CAS: 98967-40-9 EPA Chem Code: 129016 CASWELL: 348B CFR: 180.468 CFR185: REG_GROUP:	1yr feeding-dog NOEL: 100 mg/kg/day 0 ppm LEL: 500 mg/kg/day 0 ppm Newchemical Cancer: E (RfD/PR	Renal and hepatic No evidence of enicity in rats or mice.	ADI UF: 100 OPPADI: 1 RFD: 0 WHOADI: 0 QSTAR: 0	No data gaps.	RfD/PR reviewed
Flumiclorac pentyl CAS: 87546-18-7 EPA Chem Code: 128724 CASWELL: 958A CFR: CFR185: REG_GROUP:	2yr feeding-rat NOEL: 35.4 mg/kg/day 1000 ppm LEL: 360.4 mg/kg/day 10000 ppm Newchemical Cancer: E (RfD/PR	Incr absolute & relative liver wts in males; Incr absolute kidney wts in males. No evidence of enicity in rats or mice.	ADI UF: 100 OPPADI: 0.35 RFD: 0 WHOADI: 0 QSTAR: 0	No data gaps.	RfD/PR reviewed
Flumioxazin CAS: 103361-09-7 EPA Chem Code: 129034 CASWELL: CFR: CFR185: REG_GROUP:	NOEL: 0 mg/kg/day 0 ppm LEL: 0 mg/kg/day 0 ppm Newchemical Cancer:		UF: OPPADI: 0 RFD: 0 WHOADI: 0 QSTAR: 0		
Fluometuron CAS: 2164-17-2 EPA Chem Code: 035503 CASWELL: 460A CFR: 180.229 CFR185: REG_GROUP:	2yr feeding-rat NOEL: 0.55 mg/kg/day 10 ppm LEL: 17.17 mg/kg/day 300 ppm LIST A (6B) Cancer: C (HCPRC)	Splenic hemosiderin pigment deposition. Evidence of ity in M mice (lung) & F mice (lymphocytic lymphomas).	PADI UF: 100 OPPADI: 0.0055 RFD: 0.013 WHOADI: 0 QSTAR: 0	Carcinogenicity - mouse	EPA verified 07/08/86 HED reassess 03/06/87 EPA verified 03/18/87 RfD/PR reviewed RfD/PR reviewed On IRIS.
Fluorodifen CAS: 15457-05-3 EPA Chem Code: 085001 CASWELL: 462AA CFR: 180.290 CFR185: REG GROUP:	NOEL: 0 mg/kg/day 0 ppm LEL: 0 mg/kg/day 0 ppm Cancer:		UF: 0 OPPADI: 0 RFD: 0 WHOADI: 0 QSTAR: 0		

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CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Fluridone CAS: 59756-60-4 EPA Chem Code: 112900 CASWELL: 130C CFR: 180.420 CFR185: REG_GROUP:	2yr feeding-rat NOEL: 8 mg/kg/day 200 ppm LEL: 25 mg/kg/day 650 ppm Cancer: E (HED)	Glomerulonephritis, atrophy of testes, keratitis of the eye, organ and body weight No evidence of enicity in rats or mice.	ADI UF: 100 OPPADI: 0.08 RFD: 0.08 WHOADI: 0 QSTAR: 0	No data gaps. ADI based on food consumption.	HED reviewed 03/31/86 EPA verified 11/21/85 HED reassess 12/11/87 EPA verified 01/21/88 On IRIS.
Flurprimidol (Cutless) CAS: 56425-91-3 EPA Chem Code: 125701 CASWELL: 266D CFR: CFR185: REG_GROUP:	2gen reprod-rat NOEL: 1.8 mg/kg/day 25 ppm LEL: 7.3 mg/kg/day 100 ppm Cancer: Undetermined.	Incr incidence of cellular chages - fatty change & vacuolation incr susceptibility to stress factors (F). No carcinogenicity studies.	ADI UF: 100 OPPADI: 0.02 RFD: 0.02 WHOADI: 0 QSTAR: 0	Oncogenicity - mouse Oncogenicity - rat Doses based on TWA consumption & body wt.	HED reviewed 08/28/87 HED complete 03/10/89 EPA verified 04/20/89 On IRIS.
Flusilazole (Nustar) CAS: 85509-19-9 EPA Chem Code: 128835 CASWELL: 419K CFR: CFR185: REG_GROUP:	1yr feeding-dog NOEL: 0.2 mg/kg/day 5 ppm LEL: 0.7 mg/kg/day 20 ppm Cancer: Deferred	Hypertrophy of the centrilobular (male and female). Evidence of ity.	PADI UF: 300 OPPADI: 0.0007 RFD: 0.0007 WHOADI: 0.001 QSTAR: 0	No data gaps. (Syn. DPX-H6573)	HED reviewed 12/22/87 EPA verified 01/21/88 WHO reviewed 1989 On IRIS.
Flutolanil (Moncut) CAS: 66332-96-5 EPA Chem Code: 128975 CASWELL: 463N CFR: CFR185: REG_GROUP:	3gen reprod-rat NOEL: 0 mg/kg/day 0 ppm LEL: 63.7 mg/kg/day 0 ppm Newchemical Cancer: E (RfD/PR	63.7 mg/kg is NOEL/LEL based on decr body wt gains No evidence of enicity in rats or mice.	ADI UF: 100 OPPADI: 0.6 RFD: 0.06 WHOADI: 0 QSTAR: 0	No data gaps.	HED reviewed 12/14/88 EPA deferred 01/18/89 EPA verified 02/16/89 RfD/PR reviewed RfD/PR reviewed On IRIS.
Fluvalinate (Mavrik) CAS: 69409-94-5 EPA Chem Code: 109302 CASWELL: 934 CFR: 180.427 CFR185: REG GROUP:	2yr feeding-rat NOEL: 1 mg/kg/day 0 ppm LEL: 2.5 mg/kg/day 0 ppm LIST B Cancer: Undetermined	Decreased body weight gain in males and -doses given by	ADI UF: 100 OPPADI: 0.01 RFD: 0.01 WHOADI: 0 QSTAR: 0	No data gaps. Chemical is an isomeric mixture of 4 isomers, also called Racemic Fluvalinate.	HED reviewed 04/22/87 EPA verified 07/15/87 RfD/PR reviewed On IRIS.

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CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Fluvalinate, tau-	2yr feeding- rat	Decreased body weight	PADI UF: 100	Chemical is an isomeric	RfD/PR reviewed
CAS: 102851-06-9	NOEL: 1 mg/kg/day	gain in M & F - doses	OPPADI: 0.01	mixture of 2 isomers	
EPA Chem Code: 109302	*ppm*	*given by gavage.*	*RFD: 0.01*	*the original 4 isomers in*	
CASWELL: 934	LEL: 2.5 mg/kg/day		WHOADI:	Fluvalinate. Also known	
CFR: 180.427	ppm		QSTAR:	as Half-resolved.	
CFR185:				also called	
REG_GROUP:	LIST B Cancer: Undetermined				
Folpet	1yr feeding- dog	Gastric hyperkeratosis	PADI UF: 1000	Prenatal Devel Tox-	EPA verified 02/18/87
CAS: 133-07-3	NOEL: 10 mg/kg/day		OPPADI: 0.009	Reproduction- mouse	HED reassess 04/10/87
EPA Chem Code: 081601	0 ppm		RFD: 0.1		EPA verified 05/20/87
CASWELL: 464	LEL: 60 mg/kg/day	Evidence of	WHOADI: 0.01	Additional UF of 10 was	WHO reviewed 1993
CFR: 180.191	0 ppm	ity in mice (duodenum ,	QSTAR: 0.00349	recommended for FQPA	RfD/PR reviewed
CFR185:		stomach) negative in		considerations.	On IRIS.
REG_GROUP:	LIST A (6C) Cancer: B2 (HED/CRAVE)				
Fomesafen sodium (Flex)	2yr feeding- rat		UF: 100	Critical study and data	RfD is based on April
CAS: 108731-70-0	NOEL: 0.25 mg/kg/day		OPPADI: 0.0025	base not reviewed by	1987 FR Notice.
EPA Chem Code: 123802	5 ppm		RFD: 0	RfD/PR Committee.	
CASWELL: 464A	LEL: 0 mg/kg/day		WHOADI: 0		
CFR: 180.433	0 ppm		QSTAR: 0.19		
CFR185:					
REG_GROUP:	Cancer: C(q) (HED); C				
Fonofos (Dyfonate)	1yr oral tox- dog	Plasma & RBC ChE	PADI UF: 100	Reproduction- rat	HED reviewed 05/08/86
CAS: 944-22-9	NOEL: 0.2 mg/kg/day	ion.	OPPADI: 0.002		EPA verified 06/24/86
EPA Chem Code: 041701	0 ppm		RFD: 0.002		RfD/PR reviewed
CASWELL: 454B	LEL: 1 mg/kg/day		WHOADI: 0		RfD/PR reviewed
CFR: 180.221	0 ppm	No evidence of	QSTAR: 0		
CFR185:		enicity in rats or mice.			On IRIS.
REG_GROUP:	LIST A (6A) Cancer: E (RfD/PR				
Formaldehyde	2yr feeding-rat	Reduced weight gain,	UF: 100	Exempt from tolerance.	EPA deferred 05/17/90
CAS: 50-00-0	NOEL: 15 mg/kg/day	histopathology in rats	OPPADI: 0	Q* is for inhalation.	EPA verified 06/20/90
EPA Chem Code: 043001	0 ppm		RFD: 0.2		
CASWELL: 465	LEL: 82 mg/kg/day		WHOADI: 0		
CFR: 180.1032	0 ppm		QSTAR: 0.000013		
CFR185:					On IRIS.
REG GROUP:	LIST A - Cancer: B1 (CRAVE)				

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CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Formetanate hydrochloride	2yr feeding- rat	Brain ChE inhibition at	PADI UF: 300	Chronic feed/carcino-	HED reviewed 06/27/89
CAS: 23422-53-9	NOEL: 0 mg/kg/day	LDT; NOEL not	OPPADI: 0.002		EPA deferred 10/19/89
EPA Chem Code: 097301	0 ppm		RFD: 0	Additional UF of 3 to	RfD/PR reviewed
CASWELL: 465B	LEL: 0.45 mg/kg/day		WHOADI: 0	account for lack of	
CFR: 180.276	10 ppm	No evidence of	QSTAR: 0		
CFR185: 185.3450		enicity in rats or mice.			
REG_GROUP:	LIST A (5 Cancer: E (RfD/PR				
Formothion			UF: 0		WHO reviewed 1973
CAS: 2540-82-1	NOEL: 0 mg/kg/day		OPPADI: 0		
EPA Chem Code: 366400	0 ppm		RFD: 0		
CASWELL: 366C	LEL: 0 mg/kg/day		WHOADI: 0.02		
CFR:	0 ppm		QSTAR: 0		
CFR185:					
REG_GROUP:	Cancer:				
Fosamine ammonium	13wk feeding- rat	Kidney effects in males	PADI UF: 1000	Non-food use chemical.	RfD/PR reviewed
CAS: 25954-13-6	NOEL: 10 mg/kg/day		OPPADI: 0.01		
EPA Chem Code: 106701	200 ppm		RFD: 0		
CASWELL: 465G	LEL: 50 mg/kg/day		WHOADI: 0		
CFR:	1000 ppm		QSTAR: 0		
CFR185:					
REG_GROUP:	LIST B Cancer: No data				
Fosetyl-Al (Aliette)	2yr feeding- dog	Degeneration of the	ADI UF: 100	No data gaps.	HED reviewed 07/18/86
CAS: 39148-24-8	NOEL: 250 mg/kg/day	testes.	OPPADI: 3		EPA verified 09/29/86
EPA Chem Code: 123301	10000 ppm	No evidence of	RFD: 3		
CASWELL: 012B	LEL: 500 mg/kg/day	enicity in mice, positive	WHOADI: 0		
CFR: 180.415	20000 ppm	in rat (bladder) at	QSTAR: 0		
CFR185:		30,000-40,000 ppm.			On IRIS.
REG_GROUP:	LIST Cancer: C (HCPRC)				
Furfural	90d feeding- rat	Mild hepatocellular	PLD UF: 3000	Chronic feed/carcino-	EPA verified 12/15/87
CAS: 98-01-1	NOEL: 0 mg/kg/day	vacuolization.	OPPADI: 0.003	Chronic feeding- dog	HED concurs 12/15/87
EPA Chem Code: 043301	0 ppm	Along withe rat study a	RFD: 0.003	Reproduction- rat	
CASWELL: 466	LEL: 7.9 mg/kg/day	90d mouse study was	WHOADI: 0	Developmental tox- rat	
CFR:	0 ppm	ucted; the same effects	QSTAR: 0	Developmental tox-	
CFR185:		were observed.			On IRIS.
REG GROUP:	LIST B Cancer:				

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CHEMICAL	STUDY TYPE		EFFECTS	REFERENCE DOSES		DATA GAPS/COMMENTS	STATUS
Fumecyclox (Xyligen B)				UF:	0		
CAS: 60568-05-0	NOEL:	0 mg/kg/day		OPPADI:	0		
EPA Chem Code: 122601		0 ppm		RFD:	0		
CASWELL: 907B	LEL:	0 mg/kg/day		WHOADI:	0		
CFR:		0 ppm		QSTAR:	0.0298		
CFR185:							
REG_GROUP:	Cancer: B2 (HED)						
Galben (Benalaxyl)				UF:	0		WHO reviewed 1987
CAS: 71626-11-4	NOEL:	0 mg/kg/day		OPPADI:	0		
EPA Chem Code: 127001		0 ppm		RFD:	0		
CASWELL: 471AC	LEL:	0 mg/kg/day		WHOADI:	0.05		
CFR:		0 ppm		QSTAR:	0		
CFR185:							
REG_GROUP:	Cancer.						
Gibberellic acid				UF:	0		
CAS: 77-06-5	NOEL:	0 mg/kg/day		OPPADI:	0		
EPA Chem Code: 043801		0 ppm		RFD:	0		
CASWELL: 467	LEL:	0 mg/kg/day		WHOADI:	0		
CFR: 180.224		0 ppm		QSTAR:	0		
CFR185:							
REG_GROUP:	LIST D	Cancer.					
Glufosinate-ammonium	2yr feeding-rat		Increased absolute and	ADI UF:	100	Oncogenicity-rat	EPA verified 02/18/87
CAS: 77182-82-2	NOEL:	2.1 mg/kg/day	relative kidney weights	OPPADI:	0.02	Oncogenicity-mouse	WHO reviewed 1991
EPA Chem Code: 128850		40 ppm	in males.	RFD:	0.0004		RfD/PR reviewed
CASWELL: 580I	LEL:	7.6 mg/kg/day	Both carcinogenicity	WHOADI:	0.02		EPA deferred 03/24/92
CFR: 180.31		140 ppm	studies did not establish	QSTAR:	0		RfD/PR reviewed
CFR185:			an MTD.			(Syn.: Ignite,	On IRIS.
REG_GROUP:	Newchemical	Cancer. Undetermined.					
Glutaraldehyde				UF:			
CAS: 111-30-8	NOEL:	0 mg/kg/day		OPPADI:	0		
EPA Chem Code: 043901		0 ppm		RFD:	0		
CASWELL: 468	LEL:	0 mg/kg/day		WHOADI:	0		
CFR:		0 ppm		QSTAR:	0		
CFR185:							
REG GROUP:	LIST B	Cancer.					

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CHEMICAL	STUDY TYPE		EFFECTS	REFERENCE DOSES		DATA GAPS/COMMENTS	STATUS
Glyodin				UF:	0		
CAS: 556-22-9	NOEL:	0 mg/kg/day		OPPADI:	0		
EPA Chem Code: 043601		0 ppm		RFD:	0		
CASWELL: 471	LEL:	0 mg/kg/day		WHOADI:	0		
CFR: 180.124		0 ppm		QSTAR:	0		
CFR185:							
REG_GROUP:	Cancer.						
Glyphosate (+ salts)	Develop tox- rabbit		Soft stool/diarrhea; nasal discharge	ADI UF:	100	No data gaps.	WHO reviewed 1986
CAS: 1071-83-6	NOEL:	175 mg/kg/day		OPPADI:	2		HED reviewed 02/28/86
EPA Chem Code: 417300		0 ppm		RFD:	0.1		EPA verified 03/11/86
CASWELL: 661A	LEL:	350 mg/kg/day		WHOADI:	1.75		RfD/PR reviewed
CFR: 180.364		0 ppm	No evidence of enicity in rats or mice.	QSTAR:	0		WHO reviewed 1994
CFR185: 185.3500							On IRIS.
REG_GROUP:	LIST A (6B) Cancer. E (HED); D (SAP)						
Glyphosate trimesium	1yr feeding- dog		Emesis & salivation.	ADI UF:	100	No data gaps.	RfD/PR reviewed
CAS: 81591-81-3	NOEL:	10 mg/kg/day	Effects were also seen	OPPADI:	0.1		
EPA Chem Code: 128501		0 ppm	a 3-month dog study.	RFD:	0		
CASWELL: 893C	LEL:	50 mg/kg/day	=10 mg/kg; LEL=50	WHOADI:	0		
CFR:		0 ppm	No evidence of	QSTAR:	0		
CFR185:			enicity in rats or mice.			[Syn. Sulfosate]	
REG_GROUP:	List A Cancer. E (RfD/PR						
Glyphosine				UF:	0		
CAS: 2439-99-8	NOEL:	0 mg/kg/day		OPPADI:	0		
EPA Chem Code: 103602		0 ppm		RFD:	0		
CASWELL: 471A	LEL:	0 mg/kg/day		WHOADI:	0		
CFR: 180.354		0 ppm		QSTAR:	0		
CFR185:							
REG_GROUP:	Cancer.						
Halofenozide				UF:		Since this chemical is not intended for food uses & since chronic or life time exposure is an unlikley scenario, an was not established.	RfD/PR reviewed
CAS: 112226-61-6	NOEL:	mg/kg/day		OPPADI:			
EPA Chem Code: 121026		ppm		RFD:			
CASWELL:	LEL:	mg/kg/day		WHOADI:			
CFR:		ppm		QSTAR:			
CFR185:							
REG GROUP:	Newchemical Cancer.						

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CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Halosulfuron-methyl	1yr feeding - dog	Decr body wt gain;	ADI UF: 100	No data gaps	RfD/PR reviewed
CAS: 100784-20-1	NOEL: 10 mg/kg/day	changes in hematology	OPPADI: 0.1		EPA verified 02/17/94
EPA Chem Code: 128721	0 ppm	serum chemistry.	RFD: 0.1		
CASWELL: 957	LEL: 40 mg/kg/day		WHOADI: 0		
CFR:	0 ppm	No evidence of	QSTAR: 0		
CFR185:		enicity in rats or mice.		[Syn. MON 12000,	
REG_GROUP:	Newchemical Cancer: E (RfD/PR				
Haloxyfop-methyl (Verdict)	3gen reprod- rat	Reduced kidney wts in	ADI UF: 100	No data gaps.	HED reviewed 01/04/90
CAS: 69806-40-2	NOEL: 0.005 mg/kg/day	F1, & F2b adults;	OPPADI: 0.00005		EPA verified 02/21/90
EPA Chem Code: 125201	0 ppm	fertility in the F1/F2b	RFD: 0.00005	Also see Caswell No.	
CASWELL: 559E	LEL: 0.05 mg/kg/day	generation.	WHOADI: 0	and 471H.	
CFR:	0 ppm	Evidence of	QSTAR: 7.39		
CFR185:		ity in mice (liver M & F)			On IRIS.
REG_GROUP:	Cancer: B2 (HCPRC); C				
Heptachlor	2yr feeding- rat	Increased liver/body wt.	PADI UF: 300	No food uses.	HED reviewed 08/08/86
CAS: 76-44-8	NOEL: 0.15 mg/kg/day	ratio (this study used by	OPPADI: 0.0005	Chronic feeding- dog	HED reassess 01/05/87
EPA Chem Code: 044801	3 ppm	TB). ORD uses a 2yr rat	RFD: 0.0005	Developmental tox- rat	EPA verified 04/15/87
CASWELL: 474	LEL: 0.25 mg/kg/day	study for Heptachlor	WHOADI: 0.0001	Developmental tox-	WHO reviewed 1991
CFR: 180.319.	5 ppm	epoxide- LEL=.025 (liver	QSTAR: 4.5	Oral Q*: 4.5 E+0	
CFR185:		lesions). Cancer in mice.		Inhalation Q*: 1.3 E-3	On IRIS.
REG_GROUP:	LIST A - Cancer: B2 (CRAVE)				
Heptachlor Epoxide	60wk feeding- dog	Increased liver/B/W ratio,	PADI UF: 1000	Developmental tox- rat	EPA verified 12/18/85
CAS: 1024-57-3	NOEL: 0 mg/kg/day	NOEL not established.	OPPADI: 0.00001	Developmental tox-	HED reviewed 08/08/86
EPA Chem Code: 044801	0 ppm		RFD: 0.00001		EPA verified 09/16/86
CASWELL: 474F	LEL: 0.0125 mg/kg/day		WHOADI: 0.0001		WHO reviewed 1991
CFR:	0.5 ppm	Evidence of	QSTAR: 9.1	Oral Q*: 9.1 E+0	
CFR185:		ity in mouse		Inhalation Q*: 2.6 E-3	On IRIS.
REG_GROUP:	Cancer: B2 (CRAVE)				
Hexachlorobenzene (HCB)	130wk feeding- rat	Hepatic centrilobular	PLD UF: 100	Chronic feeding- 2 sp.	WHO reviewed 1978;
CAS: 118-74-1	NOEL: 0.08 mg/kg/day	basophilic	OPPADI: 0.0008	Reproduction- rat	ADI withdrawn.
EPA Chem Code: 061001	0 ppm		RFD: 0.0008	Developmental tox- 2	HED reviewed 05/05/88
CASWELL: 477	LEL: 0.29 mg/kg/day		WHOADI: 0		EPA verified 05/26/88
CFR:	0 ppm		QSTAR: 1.6	Oral Q*: 1.6 E+0	
CFR185:				Inhalation Q*: 4.6 E-4	On IRIS.
REG GROUP:	Cancer: B2 (CRAVE); 2B				

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CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Hexachlorophene CAS: 70-30-4 EPA Chem Code: 044901 CASWELL: 566 CFR: 180.302 CFR185: REG_GROUP:	13wk feeding-dog NOEL: 0 mg/kg/day 0 ppm LEL: 0.75 mg/kg/day 30 ppm LIST B Cancer: Negative-2	Swollen salivary glands, status spongiosis of the brain and optic nerve - NOEL not established. No evidence of enicity in rats or mice.	PADI UF: 3000 OPPADI: 0.0003 RFD: 0.0003 WHOADI: 0 QSTAR: 0	Chronic feeding-dog Developmental tox-2	HED reviewed 04/22/87 EPA verified 02/25/88 On IRIS.
Hexaconazole (Anvil) CAS: 79983-71-4 EPA Chem Code: 128925 CASWELL: 480G CFR: CFR185: REG_GROUP:	1yr feeding - dog NOEL: 2 mg/kg/day 0 ppm LEL: 5 mg/kg/day 0 ppm Newchemical Cancer: C(q) (HCPRC)	Fatty infiltration of the liver & increase liver weights Evidence of ity in male rats (testicular); Negativ in mice.	ADI UF: 100 OPPADI: 0.02 RFD: 0 WHOADI: 0.005 QSTAR: 0.023	No data gaps.	RfD/PR reviewed WHO reviewed 1990 RfD/PR reviewed
Hexazinone CAS: 51235-04-2 EPA Chem Code: 107201 CASWELL: 271AA CFR: 180.396 CFR185: REG_GROUP:	1yr feeding-dog NOEL: 5 mg/kg/day 200 ppm LEL: 37.57 mg/kg/day 1500 ppm LIST A Cancer: D (HCPRC)	Incr ALP, decr albumin & incr globulin in M; liver effects in M & F Evidence of ity in M & F mice (liver tumors); negative in rats	ADI UF: 100 OPPADI: 0.05 RFD: 0.033 WHOADI: 0 QSTAR: 0	No data gaps.	HED reviewed 07/11/86 HED reassess 03/06/87 EPA verified 03/18/87 RfD/PR reviewed On IRIS.
Hexythiazox (Savey) CAS: 78587-05-0 EPA Chem Code: 128849 CASWELL: 419R CFR: 180.448 CFR185: REG_GROUP:	1yr feeding-dog NOEL: 2.5 mg/kg/day 100 ppm LEL: 12.5 mg/kg/day 500 ppm Cancer: C(q) (HED); C	Hypertrophy of adenral cortex (both sexes); RBC counts, & hematocrits in males. Evidence of ity in female mice.	ADI UF: 100 OPPADI: 0.025 RFD: 0.025 WHOADI: 0.03 QSTAR: 0.039	No data gaps.	HED reviewed 01/27/88 EPA verified 02/25/88 WHO reviewed 1991 On IRIS.
Hydramethylnon (Amdro) CAS: 67485-29-4 EPA Chem Code: 118401 CASWELL: 642AB CFR: 180.395 CFR185: REG GROUP:	26wk feeding-dog NOEL: 0.33 mg/kg/day 0 ppm LEL: 1 mg/kg/day 0 ppm LIST B Cancer: C (HED)	Increased absolute and relative liver weights, increased relative brain weights. Evidence of carcinogenicity in F mice (lungs); Negative in rats	ADI UF: 1000 OPPADI: 0.0003 RFD: 0.0003 WHOADI: 0 QSTAR: 0	No data gaps. 26-week study was accepted for chronic data UF of 1000 used to toxicity seen in dog increases with time. Q* na	HED reviewed 02/21/86 EPA verified 05/20/87 On IRIS.

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CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Hydrogen cyanamide CAS: 420-04-2 EPA Chem Code: 014002 CASWELL: 266B CFR: CFR185: REG_GROUP:	1yr feeding - dog NOEL: 0.2 mg/kg/day 0 ppm LEL: 1 mg/kg/day 0 ppm Newchemical Cancer: C(q)	Decreases in MCV & M&F; increase in pale areas of the spleen in	ADI UF: 100 OPPADI: 0.002 RFD: 0 WHOADI: 0 QSTAR: 0.0674	No data gaps.	RfD/PR reviewed
Hydrogen cyanide CAS: 74-90-8 EPA Chem Code: 045801 CASWELL: 483 CFR: 180.130 CFR185: 185.3600 REG_GROUP:	2yr feeding- rat NOEL: 11.2 mg/kg/day 0 ppm LEL: 31 mg/kg/day 0 ppm Cancer.	Weight loss, thyroid effects, and myelin degeneration.	UF: 500 OPPADI: 0 RFD: 0.02 WHOADI: 0.05 QSTAR: 0	Chronic feeding- dog Developmental tox- 2 Reproduction- rat	WHO reviewed 1965 EPA verified 08/05/85 On IRIS.
Hydroprene (Altozar) CAS: 41096-46-2 EPA Chem Code: 486300 CASWELL: 456H CFR: CFR185: 185.3625 REG_GROUP:	2yr feeding- rat NOEL: 36.2 mg/kg/day 1000 ppm LEL: 377 mg/kg/day 10000 ppm LIST D Cancer: D (RfD/PR	Decr body wt gain syncytial macrophage regates in cervical nodes, deep cholesterol clefts & cortical vacuol- ation in F.	PADI UF: 300 OPPADI: 0.1 RFD: 0 WHOADI: 0 QSTAR: 0	Chronic feeding- dog Carcinogenicity- mouse CFR No. 185.3625	HED reviewed 07/17/90 RfD/PR reviewed RfD/PR reviewed
Hydroxylethyl octyl sulfide CAS: 3547-33-9 EPA Chem Code: 046301 CASWELL: 489B CFR: CFR185: REG_GROUP:	NOEL: 0 mg/kg/day 0 ppm LEL: 0 mg/kg/day 0 ppm LIST C Cancer.	Since this chemical is not intended for food uses & since chronic or life time exposure is an unlikely scenario, an was not established.	UF: OPPADI: 0 RFD: 0 WHOADI: 0 QSTAR: 0	[Syn. ol]	RfD/PR reviewed
Hymexazol (Tachigaren) CAS: 10004-44-1 EPA Chem Code: 129107 CASWELL: CFR: CFR185: REG GROUP:	NOEL: 0 mg/kg/day 0 ppm LEL: 0 mg/kg/day 0 ppm Newchemical Cancer.	No RfD was established for this chemical since it is proposed only as a non-food use at this time.	UF: OPPADI: 0 RFD: 0 WHOADI: 0 QSTAR: 0	Other pivotal studies have been submitted to OPP & are currently review. The RfD will be reevaluated pending letion of these reviews.	RfD/PR reviewed

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CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Imazalil	1yr feeding- dog	Increased vomiting &	PADI UF: 100	Chronic feed/carcino-	HED reviewed 08/08/86
CAS: 35554-44-0	NOEL: 2.5 mg/kg/day	wastage; Depressed	OPPADI: 0.025	(Core-Supplementary)	EPA verified 09/02/86
EPA Chem Code: 111901	0 ppm	body weight gains &	RFD: 0.013		WHO reviewed 1991
CASWELL: 497AB	LEL: 20 mg/kg/day	body weights.	WHOADI: 0.03		RfD/PR reviewed
CFR: 180.413	0 ppm		QSTAR: 0.062		
CFR185: 185.3650					On IRIS
REG_GROUP:	LIST B Cancer: C(q) (HCPRC)				
Imazapyr (Arsenal)			UF:		
CAS: 81334-34-1	NOEL: 0 mg/kg/day		OPPADI: 0		
EPA Chem Code: 128821	0 ppm		RFD: 0		
CASWELL: 003F	LEL: 0 mg/kg/day		WHOADI: 0		
CFR:	0 ppm	No evidence of	QSTAR: 0		
CFR185:		enicity in rats or mice.			
REG_GROUP:	LIST C Cancer: E (HCPRC)				
Imazaquin (Scepter)	1yr feeding- dog	Decreased weight gain,	ADI UF: 100	No data gaps.	HED reviewed 05/02/86
CAS: 81335-37-7	NOEL: 25 mg/kg/day	hematology changes, in-	OPPADI: 0.25		EPA verified 06/10/86
EPA Chem Code: 128848	1000 ppm	creased CPK and	RFD: 0.25		
CASWELL: 003C	LEL: 125 mg/kg/day	myopathy, bone marrow	WHOADI: 0		
CFR: 180.426	5000 ppm	hypercellularity. Neg.	QSTAR: 0		
CFR185:		onco in mouse, rat			On IRIS.
REG_GROUP:	Cancer: Negative- 1				
Imazethabenz (Assert)	1yr feeding- dog	Increased liver weight in	ADI UF: 100	No data gaps.	HED reviewed 02/25/88
CAS: 81405-85-8	NOEL: 6.25 mg/kg/day	female dogs.	OPPADI: 0.063		EPA deferred 03/23/88;
EPA Chem Code: 128842	250 ppm		RFD: 0		Pending further review
CASWELL:	LEL: 25 mg/kg/day		WHOADI: 0		by OPP and ORD.
CFR: 180.437	1000 ppm	No evidence of	QSTAR: 0		
CFR185:		enicity in rats or mice.			
REG_GROUP:	Cancer: D (HED); E (SAP)				
Imazethapyr (Pursuit)	1yr feeding- dog	Decr packed cell	ADI UF: 100	No data gaps.	HED reviewed 04/03/87
CAS: 81335-77-5	NOEL: 25 mg/kg/day	hemoglobin,	OPPADI: 0.25		HED reassess 12/05/88
EPA Chem Code: 128922	1000 ppm	in females.	RFD: 0.25		EPA deferred 01/18/89
CASWELL: 003I	LEL: 125 mg/kg/day	No evidence of	WHOADI: 0		EPA verified 10/19/89
CFR: 180.447	5000 ppm	enicity in mice; undeter-	QSTAR: 0		
CFR185:		mined in rats.			On IRIS.
REG GROUP:	Cancer: Negaitve - 1				

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CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Imidacloprid	2yr feeding- rat	Increased incidence of	ADI UF: 100	No data gaps.	RfD/PR reviewed
CAS: 105827-78-9	NOEL: 5.7 mg/kg/day	mineralized particles in	OPPADI: 0.057		
EPA Chem Code: 129099	100 ppm	thyroid colloid.	RFD: 0		
CASWELL: 497E	LEL: 16.9 mg/kg/day		WHOADI: 0		
CFR:	300 ppm	No evidence of	QSTAR: 0		
CFR185:		enicity in rats or mice.			
REG_GROUP:	Newchemical Cancer: E (RfD/PR				
Iminoctadine			UF: 0		WHO reviewed 1978
CAS: 13516-27-3	NOEL: 0 mg/kg/day		OPPADI: 0		
EPA Chem Code: 498200	0 ppm		RFD: 0		
CASWELL: 471D	LEL: 0 mg/kg/day		WHOADI: 0.03		
CFR:	0 ppm		QSTAR: 0		
CFR185:					
REG_GROUP:	Cancer.				
Imiprothrin (Pralle)			UF:	Since this chemical is	RfD/PR reviewed
CAS:	NOEL: mg/kg/day		OPPADI:	not intended for food	
EPA Chem Code: 004006	ppm		RFD:	uses & since chronic or	
CASWELL:	LEL: mg/kg/day		WHOADI:	lifetime exposure is an	
CFR:	ppm		QSTAR:	unlikely scenario, an	
CFR185:				was not established.	
REG_GROUP:	Newchemical Cancer.				
Inorganic bromides (EDB)			UF: 0		WHO reviewed 1985;
CAS: 24959-67-9	NOEL: 0 mg/kg/day		OPPADI: 0		for Bromide ion
EPA Chem Code: 053200	0 ppm		RFD: 0		from all sources.
CASWELL: 499D	LEL: 0 mg/kg/day		WHOADI: 1		
CFR: 180.126	0 ppm		QSTAR: 0		
CFR185: 185.3700					
REG_GROUP:	Cancer.				
Iprodione (Glycophene)	2yr feeding- rat	Enlargement of the cells	ADI UF: 100	No data gaps.	WHO reviewed 1977
CAS: 36734-19-7	NOEL: 6.1 mg/kg/day	of the zona glomerulosa	OPPADI: 0.06		HED reviewed 12/19/86
EPA Chem Code: 109801	150 ppm	in M&F.	RFD: 0.04		EPA verified 07/15/87
CASWELL: 470A	LEL: 12.4 mg/kg/day	Evidence of	WHOADI: 0.2		WHO reviewed 1992
CFR: 180.399	300 ppm	ity in mice (liver; M&F)	QSTAR: 0.0439		RfD/PR reviewed
CFR185: 185.3750		& rats (testicular; M).			On IRIS.
REG GROUP:	LIST B Cancer. B2 (HCPRC)				

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CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Isazofos (Triumph) CAS: 67329-04-8 EPA Chem Code: 295900 CASWELL: 195AAA CFR: CFR185: REG_GROUP:	1yr feeding - dog NOEL: 0 mg/kg/day 0 ppm LEL: 0.0018 mg/kg/day 0.05 ppm Cancer: Negative- 2	Erythrocyte ChE inhibition (LDT). No evidence of enicity in rats or mice.	PADI UF: 100 OPPADI: 0.00002 RFD: 0 WHOADI: 0 QSTAR: 0	Chronic feeding - dog (A newdog study is ired to establish NOEL for erythrocyte ChE inhibition).	HED reviewed 04/05/89 EPA deferred 05/17/89 OPP to reconsider NOEL LEL in chronic dog
Isofenphos (Amaze) CAS: 25311-71-1 EPA Chem Code: 109401 CASWELL: 447AB CFR: 180.387 CFR185: REG_GROUP:	2yr feeding- rat NOEL: 0.05 mg/kg/day 1 ppm LEL: 0.5 mg/kg/day 10 ppm LIST B Cancer.	RBC ChE inhibition.	UF: 100 OPPADI: 0.0005 RFD: 0 WHOADI: 0.001 QSTAR: 0	Critical study and data base not reviewed by RfD/PR Committee.	WHO reviewed 1986 Ad hoc meeting
Isophorone CAS: 78-59-1 EPA Chem Code: 047401 CASWELL: 506 CFR: CFR185: REG_GROUP:	90d feeding- dog NOEL: 150 mg/kg/day 0 ppm LEL: 0 mg/kg/day 0 ppm Cancer: C (CRAVE)	No effect at HDT. Doses administered by gelatin capsule. NTP carcinogenicity ies are equivocal for rats and mice.	PLD UF: 1000 OPPADI: 0.2 RFD: 0.2 WHOADI: 0 QSTAR: 0.00095	Chronic feed/carcino- Chronic feeding- dog Reproduction- rat Developmental tox- 2 NTP rat study co-critical LEL=173 mg/kg/day	HED reviewed 02/14/86 EPA verified 12/02/85 EPA verified 05/15/86 EPA verified 05/18/89 On IRIS.
Isopropalin CAS: 33820-53-0 EPA Chem Code: 100201 CASWELL: 506A CFR: 180.313 CFR185: REG_GROUP:	3mo feeding- rat NOEL: 15 mg/kg/day 250 ppm LEL: 48 mg/kg/day 750 ppm LIST A - Cancer. No data.	Decreased weight gain. Doses calculated from feed consumption.	PADI UF: 1000 OPPADI: 0.015 RFD: 0.015 WHOADI: 0 QSTAR: 0	All tolerances have revoked. Reproduction- rat Chronic feeding requirement waived.	HED reviewed 05/23/86 EPA verified 02/05/86 EAP verified 06/24/86 On IRIS.
Isoxaben (EL-107) CAS: 82558-50-7 EPA Chem Code: 125851 CASWELL: 419F CFR: CFR185: REG GROUP:	2yr feeding- rat NOEL: 5 mg/kg/day 125 ppm LEL: 50.7 mg/kg/day 1250 ppm Cancer: C (HED); D (SAP)	Increased BUN, AP and ALT; increased heart/BW ratio. Evidence of ity in rats (adrenal) and mice (liver).	ADI UF: 100 OPPADI: 0.05 RFD: 0.05 WHOADI: 0 QSTAR: 0	No data gaps.	HED reviewed 09/28/87 EPA verified 10/14/87 On IRIS.

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CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Kathon 886 (Kathon Biocide) CAS: 55965-84-9 EPA Chem Code: 107106 CASWELL: 572A CFR: CFR185: REG_GROUP:	NOEL: 0 mg/kg/day 0 ppm LEL: 0 mg/kg/day 0 ppm Cancer: D (RfD/PR	Since this chemical is not intended for food uses & since chronic or life time exposure is an unlikely scenario, an RfD was not	UF: OPPADI: 0 RFD: 0 WHOADI: 0 QSTAR: 0	No evidence of enicity in rats. [This is a mixture of 2 a.i. 107103 & 107104]	RfD/PR reviewed
Lactofen (Cobra) CAS: 77501-63-4 EPA Chem Code: 128888 CASWELL: 704B CFR: 180.432 CFR185: REG_GROUP:	18mo feeding- NOEL: 0 mg/kg/day 0 ppm LEL: 1.5 mg/kg/day 10 ppm Cancer: B2 (HED)	Increased absolute and relative liver weights, hepatocytomegaly; not established. Evidence of ity rats & mice (liver)	PADI UF: 1000 OPPADI: 0.002 RFD: 0.002 WHOADI: 0 QSTAR: 0.17	No data gaps. UF of 1000 used due to lack of NOEL in critical study (mouse onco).	HED reviewed 03/03/87 EPA verified 07/15/87 On IRIS.
Lead arsenate (standard) CAS: 53404-12-9 EPA Chem Code: 013502 CASWELL: 524 CFR: 180.194 CFR185: REG_GROUP:	NOEL: 0 mg/kg/day 0 ppm LEL: 0 mg/kg/day 0 ppm LIST B Cancer.		UF: 0 OPPADI: 0 RFD: 0 WHOADI: 0 QSTAR: 0	All tolerances have revoked.	WHO reviewed 1968; not established.
Leptophos (MBCP) CAS: 21609-90-5 EPA Chem Code: 525300 CASWELL: 525B CFR: CFR185: REG_GROUP:	NOEL: 0 mg/kg/day 0 ppm LEL: 0 mg/kg/day 0 ppm Cancer.		UF: OPPADI: 0 RFD: 0 WHOADI: 0 QSTAR: 0		WHO reviewed 1978; ADI withdrawn.
Lindane (gamma BHC) CAS: 58-89-9 EPA Chem Code: 009001 CASWELL: 527 CFR: 180.133 CFR185: REG GROUP:	2yr feeding-rat NOEL: 0.47 mg/kg/day 10 ppm LEL: 4.81 mg/kg/day 100 ppm LIST A (3 SR) Cancer. B2/C (CAG)	Periacinar hepatocyte. hypertrophy, increased liver & spleen wts; incr in platelets.	ADI UF: 100 OPPADI: 0.0047 RFD: 0.0003 WHOADI: 0.008 QSTAR: 0	Oncogenicity - mouse [Syn. Hexachlorocyclo-hexane-gamma]	HED pending 10/11/85 EPA verified 01/22/86 WHO reviewed 1989 RfD/PR reviewed On IRIS.

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CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Linuron	1yr feeding-dog	Hematology changes	ADI UF: 100	No data gaps.	HED reviewed 02/21/86
CAS: 330-55-2	NOEL: 0.77 mg/kg/day		OPPADI: 0.008		EPA verified 05/14/86
EPA Chem Code: 035506	25 ppm		RFD: 0.002		RfD/PR reviewed
CASWELL: 528	LEL: 3.49 mg/kg/day	Evidence of	WHOADI: 0		RfD/PR reviewed
CFR: 180.184	125 ppm	ity in rat (interstitial	QSTAR: 0		
CFR185:		cell tumors).			On IRIS.
REG_GROUP:	LIST A (6A) Cancer: C				
MCPA acid (+ salts)	1yr feeding-dog	Kidney & liver toxicity	PADI UF: 100	Developmental tox- rat	HED reassess 03/06/87
CAS: 94-74-6	NOEL: 0.15 mg/kg/day	in mid & high dose levels	OPPADI: 0.0015	Developmental tox-	EPA verified 03/18/87
EPA Chem Code: 030501	6 ppm		RFD: 0.0005		HED reassess 06/03/88
CASWELL: 557C	LEL: 0.75 mg/kg/day		WHOADI: 0		EPA verified 06/22/88
CFR: 180.339	30 ppm	No evidence of	QSTAR: 0	[Syn. Methyl-4-chloro-	HED reassess 06/27/89
CFR185:		enicity in rats or mice.		phenoxy acetic acid]	On IRIS.
REG_GROUP:	LIST A (5 Cancer: Negative- 2				
MCPB (sodium)	13wk feeding-dog	Decreased B/W gain,	PLD UF: 1000	Chronic feed/carcino-	HED reviewed 09/28/87
CAS: 94-81-5	NOEL: 12 mg/kg/day	atrophy of testes and	OPPADI: 0.01	Chronic feeding- dog	EPA verified 10/14/87
EPA Chem Code: 019202	480 ppm	prostate. 90d rat study	RFD: 0.01	Reproduction- rat	
CASWELL: 558	LEL: 40 mg/kg/day	is co-critical.	WHOADI: 0	Developmental tox- 2	
CFR: 180.318	1600 ppm	No carcinogenicity data	QSTAR: 0	Carcinogenicity- mouse	
CFR185:		is available.			On IRIS.
REG_GROUP:	LIST B Cancer: Undetermined.				
MCPP (Mecoprop)(+ salts)	90d feeding- rat	Increased absolute and	PLD UF: 3000	Chronic feed/carcino-	EPA verified 11/06/85
CAS: 7085-19-0	NOEL: 3 mg/kg/day	relative kidney weights.	OPPADI: 0.001	Chronic feeding- dog	HED reviewed 09/14/88
EPA Chem Code: 031501	50 ppm	(Actual dose tested)	RFD: 0.001	Reproduction- rat	EPA verified 10/12/88
CASWELL: 559	LEL: 9 mg/kg/day		WHOADI: 0	Carcinogenicity- mouse	
CFR:	150 ppm		QSTAR: 0		
CFR185:				No food uses.	On IRIS.
REG_GROUP:	LIST A (6C) Cancer: Undetermined.				
MGK 264			UF: 0		WHO reviewed 1967;
CAS: 113-48-4	NOEL: 0 mg/kg/day		OPPADI: 0		not established.
EPA Chem Code: 057001	0 ppm		RFD: 0		
CASWELL: 613	LEL: 0 mg/kg/day		WHOADI: 0		
CFR: 180.367	0 ppm		QSTAR: 0	[Syn. N-Octyl	
CFR185: 185.4500				tene dicarboximide]	
REG GROUP:	LIST B Cancer: C (HCPRC)				

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CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
MGK 326 (Repellent 333) CAS: 136-45-8 EPA Chem Code: 047201 CASWELL: 400 CFR: 180.143 CFR185: REG_GROUP:	90d feeding- dog NOEL: 0 mg/kg/day 5000 ppm LEL: 0 mg/kg/day 7500 ppm LIST B Cancer: B2 (HCPRC)		UF: 1000 OPPADI: 0.125 RFD: 0 WHOADI: 0 QSTAR: 0.0024	Critical study and data base not reviewed by RfD/PR Committee. [Syn. Dipropyl omaronate]	
MON 13900 CAS: 121776-33-8 EPA Chem Code: CASWELL: CFR: CFR185: REG_GROUP:	90d feeding- dog NOEL: 5 mg/kg/day 0 ppm LEL: 15 mg/kg/day 0 ppm Safener Cancer: No data	Bile duct inflammation in females	PLD UF: 1000 OPPADI: 0.005 RFD: 0 WHOADI: 0 QSTAR: 0	Chronic feed/carcino- Chronic feeding- dog Reproduction- rat Development tox- rabbit	RfD/PR reviewed
MON 21200 (Genesis) CAS: 82697-71-0 EPA Chem Code: 128726 CASWELL: 935 CFR: CFR185: REG_GROUP:	1yr feeding- dog NOEL: 5 mg/kg/day 0 ppm LEL: 0 mg/kg/day 0 ppm Newchemical Cancer: C (HCPRC)	Epididymitis (Minimal, slight or moderate). Evidence of ity in F mice (histiocy- tic sarcomas).	ADI UF: 100 OPPADI: 0.05 RFD: 0 WHOADI: 0 QSTAR: 0	No data gaps.	RfD/PR reviewed
MON 4660 CAS: EPA Chem Code: 911509 CASWELL: 298B CFR: 180.465 CFR185: REG_GROUP:	NOEL: 0 mg/kg/day 0 ppm LEL: 0 mg/kg/day 0 ppm Safener Cancer:	RfD/PR Committee ended the subchronic *be rereviewed.*	UF: OPPADI: 0 RFD: 0 WHOADI: 0 QSTAR: 0	Insufficient data for RfD derivation. [Syn. -4-azaspiro[4.5]	RfD/PR reviewed
MSMA CAS: 2163-80-6 EPA Chem Code: 013803 CASWELL: 582 CFR: 180.289 CFR185: REG GROUP:	2yr feeding- rat NOEL: 3.2 mg/kg/day 0 ppm LEL: 27 mg/kg/day 0 ppm LIST B Cancer:	Acute inflammation, sal ulceration & perfora- tions of the large intes- tine.	UF: 300 OPPADI: 0.01 RFD: 0 WHOADI: 0 QSTAR: 0	Critical study and data base not reviewed by RfD/PR Committee. Data base includes MAA & studies. [Syn. acid methanearsonate]	AD hoc meeting

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CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Magnesium arsenate CAS: 10103-50-1 EPA Chem Code: 013504 CASWELL: 529 CFR: 180.195 CFR185: REG_GROUP:	NOEL: 0 mg/kg/day 0 ppm LEL: 0 mg/kg/day 0 ppm Cancer:		UF: 0 OPPADI: 0 RFD: 0 WHOADI: 0 QSTAR: 0		
Magnesium phosphide CAS: 12057-74-8 EPA Chem Code: 218100 CASWELL: 532B CFR: 180.375 CFR185: 185.3800 REG_GROUP:	NOEL: 0 mg/kg/day 0 ppm LEL: 0 mg/kg/day 0 ppm LIST A (6B) Cancer:		UF: 0 OPPADI: 0 RFD: 0 WHOADI: 0 QSTAR: 0	Insufficient data for RfD determination. (See Aluminum	
Malathion CAS: 121-75-5 EPA Chem Code: 057701 CASWELL: 535 CFR: 180.111 CFR185: 185.3850 REG_GROUP:	Human ChE Study NOEL: 0.23 mg/kg/day 0 ppm LEL: 0.34 mg/kg/day 0 ppm LIST A (6C) Cancer: D (HED)	Depression in plasma RBC ChE activity. No evidence of enicity in rats; mouse study equivocal.	PADI UF: 10 OPPADI: 0.02 RFD: 0.02 WHOADI: 0.02 QSTAR: 0	Chronic feeding- dog Reproduction- rat Developmental tox-	WHO reviewed 1966 HED reviewed 08/29/86 HED reviewed 03/06/87 EPA verified 03/18/87 On IRIS.
Maleic hydrazide CAS: 123-33-1 EPA Chem Code: 051501 CASWELL: 352 CFR: 180.175 CFR185: 185.3900 REG_GROUP:	2yr feeding- rat NOEL: 25 mg/kg/day 0 ppm LEL: 500 mg/kg/day 0 ppm LIST A (6C) Cancer: E (RfD/PR	Decr body wt gain in M 1yr dog study co-critical NOEL=29; LEL=87 Decr wt gain & heart wt No evidence of enicity in rats or mice.	ADI UF: 100 OPPADI: 0.25 RFD: 0.5 WHOADI: 5 QSTAR: 0	No data gaps. Registration includes the Potassium salt	WHO reviewed 1984 HED reviewed 05/19/86 EPA verified 07/22/86 RfD/PR reviewed On IRIS.
Mancozeb CAS: 8018-01-7 EPA Chem Code: 014504 CASWELL: 913A CFR: 180.176 CFR185: 185.6300 REG GROUP:	90d feeding- dog NOEL: 3 mg/kg/day 100 ppm LEL: 29 mg/kg/day 1000 ppm LIST A (3 SR) Cancer: B2 (HCPRC)	Decreased weight gain, hypogenesis of Doses calculated from food consumption. (See ETU).	PADI UF: 1000 OPPADI: 0.003 RFD: 0 WHOADI: 0.03 QSTAR: 0.06	Chronic feed/carcino- Reproduction- rat Developmental tox- Q* is from Ethylene thio-urea/	HED reviewed 10/15/86 WHO reviewed 1993; ADI w/Mancozeb, Zineb.

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CHEMICAL	STUDY TYPE			EFFECTS	REFERENCE DOSES			DATA GAPS/COMMENTS	STATUS
Maneb	6mo feeding-			Increased thyroid	PADI UF:	1000	Chronic feed/carcino-		WHO reviewed 1980;
CAS: 12427-38-2	NOEL:	5	mg/kg/day	inhibition of I-131 up-	OPPADI:	0.005	Chronic feeding- dog		Mancozeb.
EPA Chem Code: 014505		100	ppm	take at 3000 ppm.	RFD:	0.005	Reproduction- rat		HED reviewed 10/15/86
CASWELL: 539	LEL:	15	mg/kg/day	No adequate	WHOADI:	0.05	Developmental tox- rat		HED reassess 09/28/87
CFR: 180.110		300	ppm	ity data available (see	QSTAR:	0.06	Developmental tox-		EPA verified 10/14/87
CFR185: 185.6300				ETU).			Q* from Ethylene		On IRIS.
REG_GROUP:	LIST A (3 SR)	Cancer:	B2 (HCPRC)						
Manganous dimethyldithicarba					UF:	0			
CAS: 15339-36-3	NOEL:	0	mg/kg/day		OPPADI:	0			
EPA Chem Code: 034802		0	ppm		RFD:	0			
CASWELL: 539B	LEL:	0	mg/kg/day		WHOADI:	0			
CFR: 180.161		0	ppm		QSTAR:	0			
CFR185:									
REG_GROUP:	Cancer:								
Mecarbam					UF:	0			WHO reviewed 1986
CAS: 2595-54-2	NOEL:	0	mg/kg/day		OPPADI:	0			
EPA Chem Code: 340100		0	ppm		RFD:	0			
CASWELL: 340	LEL:	0	mg/kg/day		WHOADI:	0.002			
CFR:		0	ppm		QSTAR:	0			
CFR185:									
REG_GROUP:	Cancer:								
Mefluidine diethanolamine					UF:	0			
CAS: 53780-36-2	NOEL:	0	mg/kg/day		OPPADI:	0			
EPA Chem Code: 114002		0	ppm		RFD:	0			
CASWELL: 333AA	LEL:	0	mg/kg/day		WHOADI:	0			
CFR: 180.386		0	ppm		QSTAR:	0			
CFR185:									
REG_GROUP:	LIST B	Cancer:							
Mepiquat chloride	1yr/3mn feeding-			Sedation & tonoclonic	ADI UF:	100	No data gaps.		HED reviewed 12/22/87
CAS: 24307-26-4	NOEL:	58.4	mg/kg/day	spasms; dec. body wts;	OPPADI:	0.6			EPA verified 02/25/88
EPA Chem Code: 109101		1800	ppm	hematological effects	RFD:	0	1-Year & 3-Month Dog		RfD/PR reviewed
CASWELL: 380AB	LEL:	95.3	mg/kg/day		WHOADI:	0	studies were combined		
CFR: 180.384		3000	ppm	No evidence of	QSTAR:	0	generate NOEL/LEL.		
CFR185: 185.2275				enicity in rats & mice.					On IRIS.
REG GROUP:	LIST B	Cancer:		E (RfD/PR					

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CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Mercaptobenzothiazole, 2-	2gen reprod- rat	Decr body wt & body	PADI UF: 300	Chronic feeding- dog	RfD/PR reviewed
CAS: 149-30-4	NOEL: 194 mg/kg/day	gain; incr incidences of	OPPADI: 0.6	Developmental tox-	
EPA Chem Code: 051701	2500 ppm	microscopic changes.	RFD: 0		
CASWELL: 541	LEL: 695 mg/kg/day	Evidence of	WHOADI: 0		
CFR: 180.160	8750 ppm	ity in rats (pheochromo-	QSTAR: 0		
CFR185:		cytomas, M&F).		[Syn. 2-MBT]	
REG_GROUP:	LIST B Cancer: C (HED)				
Merphos (Folex)	90d neurotox- hen	Ataxia, delayed neuro-	PLD UF: 3000	Critical study and data	EPA pending 11/21/85
CAS: 150-50-5	NOEL: 0.1 mg/kg/day	toxicity and weight loss.	OPPADI: 0	base not reviewed by	EPA verified 08/13/87
EPA Chem Code: 074901	0 ppm		RFD: 0.00003	RFD/PR Committee.	
CASWELL: 865	LEL: 0.5 mg/kg/day		WHOADI: 0		
CFR: 180.186	0 ppm		QSTAR: 0		
CFR185:					On IRIS.
REG_GROUP:	LIST B Cancer:				
Metalaxyl	6mo feeding- dog	Increased alkaline phos-	ADI UF: 100	No data gaps.	WHO reviewed 1982
CAS: 57837-19-1	NOEL: 7.41 mg/kg/day	phatase activity, incr	OPPADI: 0.074		HED reviewed 05/23/86
EPA Chem Code: 113501	250 ppm	relative liver weights.	RFD: 0.074		EPA verified 07/08/86
CASWELL: 375AA	LEL: 32.36 mg/kg/day		WHOADI: 0.03		RfD/PR reviewed
CFR: 180.408	1000 ppm	No evidence of	QSTAR: 0		EPA verified 12/08/94
CFR185: 185.4000		enicity in rats or mice.			On IRIS.
REG_GROUP:	LIST A (4 Cancer: E (HED)				
Metaldehyde			UF: 0	Insufficient data for RfD	HED reviewed 11/14/88
CAS: 108-62-3	NOEL: 0 mg/kg/day		OPPADI: 0	determination.	Ad hoc meeting
EPA Chem Code: 053001	0 ppm		RFD: 0		
CASWELL: 548	LEL: 0 mg/kg/day		WHOADI: 0		
CFR:	0 ppm		QSTAR: 0		
CFR185: 185.4025					
REG_GROUP:	LIST A (6C) Cancer:				
Metam sodium	1yr & 90d feed-	No effects were	ADI UF: 100	No data gaps.	RfD/PR reviewed
CAS: 137-42-8	NOEL: 1 mg/kg/day	90-Day Dog NOEL/LEL	OPPADI: 0.01	2-Yr Mouse Study is co-	
EPA Chem Code: 039003	0 ppm	/5 mg/kg (changes in cli-	RFD: 0	critical; NOEL/LEL are	
CASWELL: 780	LEL: 5 mg/kg/day	nical chemistry; liver)	WHOADI: 0	1.6/6.5 mg/kg.	
CFR:	0 ppm	Evidence of	QSTAR: 0.198	[Syn. Sodium	
CFR185:		ity in rats & mice.		thiocarbamate]	
REG GROUP:	LIST B Cancer: B2 (HCPRC)				

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CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Metarhizium anisopliae ESF1			UF:		
CAS: 67892-13-1	NOEL: 0 mg/kg/day		OPPADI: 0		
EPA Chem Code: 129056	0 ppm		RFD: 0		
CASWELL:	LEL: 0 mg/kg/day		WHOADI: 0		
CFR:	0 ppm		QSTAR: 0	[Syn. Metarhizium anisopliae Stain ESF1]	
CFR185: 185.4035					
REG_GROUP:	Cancer:				
Methamidophos (Monitor)	56d feeding-rat	ChE inhibition (plasma,	ADI UF: 30	No data gaps.	HED reassess 04/03/87
CAS: 10265-92-6	NOEL: 0 mg/kg/day	RBC & brain); LDT was	OPPADI: 0.001		EPA verified 05/20/87
EPA Chem Code: 101201	0 ppm	considered a threshold	RFD: 0.00005		WHO reviewed 1990
CASWELL: 378A	LEL: 0.03 mg/kg/day	level.	WHOADI: 0.004		RfD/PR reviewed
CFR: 180.315	0.5 ppm	No evidence of	QSTAR: 0		RfD/PR reviewed
CFR185:		enicity in rats or mice.			On IRIS.
REG_GROUP:	LIST A (6A) Cancer: E (RfD/PR				
Methane arsonic acid (MAA)	2yr feeding-rat	Acute inflammation,	UF: 300	Critical study and data	Ad hoc meeting
CAS: 124-58-3	NOEL: 3.2 mg/kg/day	ssl ulceration & perfora-	OPPADI: 0.01	base not reviewed by	
EPA Chem Code: 128876	0 ppm	tions of the large intes-	RFD: 0	RfD/PR Committee.	
CASWELL: 549A	LEL: 27 mg/kg/day	tine.	WHOADI: 0		
CFR: 180.289	0 ppm		QSTAR: 0.138	Data base includes	
CFR185:				MSMA studies.	
REG_GROUP:	Cancer:				
Methazole			UF: 0		
CAS: 20354-26-1	NOEL: 0 mg/kg/day		OPPADI: 0		
EPA Chem Code: 106001	0 ppm		RFD: 0		
CASWELL: 549AA	LEL: 0 mg/kg/day		WHOADI: 0		
CFR: 180.357	0 ppm		QSTAR: 0		
CFR185:					
REG_GROUP:	LIST B Cancer:				
Methidathion	1yr feeding-dog	Elevated hepatice	ADI UF: 100	No data gaps.	HED reviewed 10/30/87
CAS: 950-37-8	NOEL: 0.15 mg/kg/day	gross hepatic lesions;	OPPADI: 0.0015		EPA verified 01/21/88
EPA Chem Code: 100301	4 ppm	chronic hepatitis; RBC	RFD: 0.001		WHO reviewed 1992
CASWELL: 378B	LEL: 1.33 mg/kg/day	ChE inhibition. Evidence	WHOADI: 0.001		RFD/PR reviewed
CFR: 180.298	40 ppm	of carcinogenicity mice	QSTAR: 0		
CFR185:		(liver); negative in rat.			On IRIS.
REG GROUP:	LIST A (4 Cancer: C (HED)				

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CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Methiocarb (Mesurol) CAS: 2032-65-7 EPA Chem Code: 100501 CASWELL: 578B CFR: 180.320 CFR185: REG_GROUP:	2yr feeding- dog NOEL: 1.5 mg/kg/day 60 ppm LEL: 6 mg/kg/day 240 ppm LIST A (6C) Cancer: D (RfD/PR	Tremors and muscle ness. No evidence of enicity in rats or mice.	PADI UF: 300 OPPADI: 0.005 RFD: 0 WHOADI: 0.001 QSTAR: 0	Reproduction - rat	HED reviewed 03/31/86 EPA deferred 11/25/86 WHO reviewed 1987 RfD/PR reviewed RfD/PR reviewed
Methomyl CAS: 16752-77-5 EPA Chem Code: 090301 CASWELL: 549C CFR: 180.253 CFR185: 185.4100 REG_GROUP:	2yr feeding- dog NOEL: 2.5 mg/kg/day 100 ppm LEL: 10 mg/kg/day 400 ppm LIST A (4 Cancer: Not Likely (RFDC)	Swollen/irregular epithelial cells of the proximal convoluted tubules No evidence of enicity in rats or mice.	ADI UF: 300 OPPADI: 0.008 RFD: 0.025 WHOADI: 0.03 QSTAR: 0	No data gaps. Additional UF of 3 used to account for lack of acute & subchronic toxicity studies.	HED reviewed 03/21/86 EPA verified 04/22/86 WHO reviewed 1989 RfD/PR reviewed RfD/PR reviewed On IRIS.
Methoprene (Altosid) CAS: 40596-69-8 EPA Chem Code: 105401 CASWELL: 028AAA CFR: 180.359 CFR185: 185.4150 REG_GROUP:	18mo feeding- NOEL: 37.5 mg/kg/day 250 ppm LEL: 150 mg/kg/day 1000 ppm LIST Cancer:	Liver pigmentation.	ADI UF: 100 OPPADI: 0.4 RFD: 0 WHOADI: 0.1 QSTAR: 0	No data gaps.	WHO reviewed 1987 Ad hoc meeting HED complete 07/17/90
Methoxychlor CAS: 72-43-5 EPA Chem Code: 034001 CASWELL: 550 CFR: 180.120 CFR185: REG_GROUP:	Develop tox- rabbit NOEL: 5.01 mg/kg/day 0 ppm LEL: 35.5 mg/kg/day 0 ppm LIST A (6C) Cancer: D (HED)	Excessive loss of litters	PLD UF: 1000 OPPADI: 0.005 RFD: 0.005 WHOADI: 0.1 QSTAR: 0	Chronic feed/carcino- Chronic feeding- dog Reproduction- rat Developmental tox- 2 Carcinogenicity- mouse	WHO reviewed 1977 HED reviewed 09/14/88 EPA deferred 04/18/90 EPA deferred 05/17/90 EPA verified 06/20/90 On IRIS.
Methyl ethyl ketone (MEK) CAS: 78-93-3 EPA Chem Code: 044103 CASWELL: 568E CFR: CFR185: REG GROUP:	12wk inhalation- NOEL: 46 mg/kg/day 235 ppm LEL: 130.5 mg/kg/day 0 ppm LIST C Cancer: D (CRAVE)	Fetotoxicity in rats.	UF: 1000 OPPADI: 0 RFD: 0.05 WHOADI: 0 QSTAR: 0	Critical study and data base not reviewed by RfD/PR Committee.	EPA verified 07/08/85 On IRIS.

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CHEMICAL	STUDY TYPE		EFFECTS	REFERENCE DOSES		DATA GAPS/COMMENTS	STATUS
Methyl formate				UF:		Insufficient data for RfD	Ad hoc meeting
CAS: 107-31-3	NOEL:	0 mg/kg/day		OPPADI:	0	derivation.	
EPA Chem Code: 053701		0 ppm		RFD:	0		
CASWELL: 570	LEL:	0 mg/kg/day		WHOADI:	0		
CFR:		0 ppm		QSTAR:	0		
CFR185: 185.4300							
REG_GROUP:	Cancer.						
Methyl isobutyl ketone	13wk gavage - rat		Increased kidney wts &	UF:	3000		EPA verified 05/30/86
CAS: 108-10-1	NOEL:	250 mg/kg/day	urinary protein levels in	OPPADI:	0		EPA deferred 02/20/91
EPA Chem Code: 044105		0 ppm	females; increased liver	RFD:	0.08		EPA verified 07/22/93
CASWELL: 574AA	LEL:	1000 mg/kg/day	wts in males & females.	WHOADI:	0		
CFR:		0 ppm		QSTAR:	0		
CFR185:						[Syn. MIBK]	
REG_GROUP:	List D Cancer.						
Methyl isothiocyanate (MITC)				UF:		RfD/Peer Review	RfD/PR reviewed
CAS: 556-61-6	NOEL:	0 mg/kg/day		OPPADI:	0	determined that the	
EPA Chem Code: 068103		0 ppm		RFD:	0	existing data base was	
CASWELL: 573	LEL:	0 mg/kg/day		WHOADI:	0	inadequate to derive an	
CFR:		0 ppm		QSTAR:	0	RfD assessment.	
CFR185:							
REG_GROUP:	LIST B	Cancer.					
Methyl nonyl ketone			Since this chemical is	UF:			RfD/PR reviewed
CAS: 112-12-9	NOEL:	0 mg/kg/day	not intended for food	OPPADI:	0		
EPA Chem Code: 044102		0 ppm	uses & since chronic or	RFD:	0		
CASWELL: 573O	LEL:	0 mg/kg/day	life time exposure is an	WHOADI:	0		
CFR:		0 ppm	unlikely scenario, an	QSTAR:	0		
CFR185:			was not established.			[Syn. 2-Undecanone]	
REG_GROUP:	LIST C	Cancer.					
Methyl parathion	2yr feeding- rat		Decr RBC ChE; Decr Ht	PADI	UF: 100	Chronic feeding- dog	WHO reviewed 1984
CAS: 298-00-0	NOEL:	0.025 mg/kg/day	Hb; tentative pending	OPPADI:	0.00025	Chronic feeding- rat	HED complete 10/10/86
EPA Chem Code: 053501		0.5 ppm	submission of data for	RFD:	0.00025	(Core-supplementary)	EPA verified 12/09/86
CASWELL: 372	LEL:	0.25 mg/kg/day	sciatic nerve changes.	WHOADI:	0.02	ADI is tentative pending	
CFR: 180.121		5 ppm	evidence of	QSTAR:	0	evaluation of sciatic	
CFR185:			ity in mice; rats pending			nerve effects.	On IRIS.
REG GROUP:	LIST A (6B)	Cancer. Negative- 1					

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CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Methylene bis(thiocyanate)	1yr feeding- dog	Marginal changes in	ADI UF: 100	No data gaps.	RfD/PR reviewed
CAS: 6317-18-6	NOEL: 0.5 mg/kg/day	chemistry & pathology	OPPADI: 0.005		
EPA Chem Code: 068102	0 ppm	findings in the stomach	RFD: 0		
CASWELL: 565	LEL: 2 mg/kg/day	bone marrow.	WHOADI: 0		
CFR:	0 ppm		QSTAR: 0		
CFR185:					
REG_GROUP:	LIST B Cancer. D (RfD/PR				
Methylene chloride			UF:		
CAS: 75-09-2	NOEL: 0 mg/kg/day		OPPADI: 0		
EPA Chem Code: 042004	0 ppm		RFD: 0		
CASWELL: 568	LEL: 0 mg/kg/day		WHOADI: 0		
CFR:	0 ppm		QSTAR: 0		
CFR185: 185.4250					
REG_GROUP:	LIST C Cancer.				
Metiram	3gen reprod- rat	Reduced litter sizes.	PADI UF: 1000	Chronic feeding- dog	HED reviewed 10/15/86
CAS: 9006-42-2	NOEL: 0 mg/kg/day	NOEL not established.	OPPADI: 0.0003	Developmental tox-	WHO reviewed 1993:
EPA Chem Code: 014601	0 ppm	Ethylene thiourea is a	RFD: 0	MF of 10 used for data	ADI w/Mancozeb,
CASWELL: 041A	LEL: 0.25 mg/kg/day	metabolite of Metiram.	WHOADI: 0.03	gaps and lack of NOEL	Zineb.
CFR: 180.217	5 ppm	See carcinogenicity	QSTAR: 0	critical study.	
CFR185:		ription for this chemical			
REG_GROUP:	LIST A (3 SR) Cancer. See ETU (B2)				
Metobromuron			UF: 0		
CAS: 3060-89-7	NOEL: 0 mg/kg/day		OPPADI: 0		
EPA Chem Code: 035901	0 ppm		RFD: 0		
CASWELL: 579A	LEL: 0 mg/kg/day		WHOADI: 0		
CFR: 180.250	0 ppm		QSTAR: 0		
CFR185:					
REG_GROUP:	Cancer.				
Metolachlor	1yr feeding- dog	Decreased body weight	ADI UF: 100	No data gaps.	EPA verified 06/22/88
CAS: 51218-45-2	NOEL: 9.7 mg/kg/day	gain.	OPPADI: 0.1		RfD/PR reviewed
EPA Chem Code: 108801	300 ppm		RFD: 0.1		RfD/PR reviewed
CASWELL: 188DD	LEL: 32.7 mg/kg/day		WHOADI: 0		RfD/PR reviewed
CFR: 180.368	1000 ppm	Evidence of	QSTAR: 0		EPA verified 12/14/93
CFR185:		ity in rats (F - liver).		Q* calculated.	On IRIS.
REG GROUP:	LIST A (4 Cancer. C (HED); C (SAP)				

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CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Metribuzin (Sencor) CAS: 21087-64-9 EPA Chem Code: 101101 CASWELL: 033D CFR: 180.332 CFR185: 185.250 REG_GROUP:	2yr feeding-rat NOEL: 1.3 mg/kg/day 30 ppm LEL: 13.8 mg/kg/day 300 ppm LIST A (6B) Cancer: D (RfD/PR	Decr body wt gain in F; incr thyroid wt & thyroid /body wt ratio in M; incr liver wt & liver/body wt in M & F.	ADI UF: 100 OPPADI: 0.013 RFD: 0.013 WHOADI: 0 QSTAR: 0	No data gaps. 2-Gen Repro Study is critical: NOEL/LEL is 1.5 /7.5 mg/kg-day.	RfD/PR reviewed EPA deferred 02/16/94 RfD/PR reviewed EPA verified 12/08/94 RfD/PR reviewed On IRIS.
Metsulfuron-methyl (Ally) CAS: 74223-64-6 EPA Chem Code: 122010 CASWELL: 419H CFR: 180.428 CFR185: REG_GROUP:	2yr feeding-rat NOEL: 25 mg/kg/day 500 ppm LEL: 250 mg/kg/day 5000 ppm Cancer: Negative- 2	Decreased body weight gain. No evidence of enicity in rats or mice, however mouse study not have an MTD.	ADI UF: 100 OPPADI: 0.25 RFD: 0.25 WHOADI: 0 QSTAR: 0	No data gaps.	HED reviewed 03/21/86 EPA pending 04/22/86 HED reassess 06/12/87 EPA verified 08/12/87 On IRIS.
Mevinphos (Phosdrin) CAS: 7786-34-7 EPA Chem Code: 015801 CASWELL: 160B CFR: 180.157 CFR185: 185.4200 REG_GROUP:	2yr feeding-dog NOEL: 0.025 mg/kg/day 0 ppm LEL: 0 mg/kg/day 0 ppm LIST A (6C) Cancer:	Plasma and RBC ChE ition.	UF: 100 OPPADI: 0.00025 RFD: 0 WHOADI: 0.0015 QSTAR: 0	Critical study and data base not reviewed by RfD/PR Committee. RfD will be evaluated in 1988 Reg. Std.	WHO reviewed 1972 HED deferred 05/05/87 Ad hoc meeting
Mineral oil CAS: 8012-95-1 EPA Chem Code: 063502 CASWELL: 580 CFR: 180.149 CFR185: REG_GROUP:	NOEL: 0 mg/kg/day 0 ppm LEL: 0 mg/kg/day 0 ppm LIST C Cancer:		UF: 0 OPPADI: 0 RFD: 0 WHOADI: 0 QSTAR: 0		
Mirex CAS: 2385-85-5 EPA Chem Code: 039201 CASWELL: 411 CFR: 180.251 CFR185: REG GROUP:	2yr feeding-rat NOEL: 0.7 mg/kg/day 1 ppm LEL: 0.015 mg/kg/day 10 ppm Cancer: B2 (CRAVE)	Liver cytomegally, fatty metamorphsis, thyroid cystic follicles Evidence of ity in the rat (liver).	PLD UF: 300 OPPADI: 0.0002 RFD: 0.0002 WHOADI: 0 QSTAR: 0	Chronic feed/carcino- Chronic feeding-dog Reproduction-rat Developmental tox-rat Developmental tox-	HED reassess 03/17/87 EPA verified 04/15/87 RfD/PR reviewed EPA verified 06/24/92 CRAVE verified On IRIS.

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CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Mitin FF CAS: 3567-25-7 EPA Chem Code: 058802 CASWELL: 755C CFR: CFR185: REG_GROUP:	NOEL: 0 mg/kg/day 0 ppm LEL: 0 mg/kg/day 0 ppm LIST C Cancer.		UF: OPPADI: 0 RFD: 0 WHOADI: 0 QSTAR: 0	Since this chemical is not intended for food uses & since chronic or life time exposure is an unlikely scenario, an was not established.	RfD/PR reviewed
Molinate (Ordram) CAS: 2212-67-1 EPA Chem Code: 041402 CASWELL: 444 CFR: 180.228 CFR185: REG_GROUP:	Fertility study- rat NOEL: 0.2 mg/kg/day 0 ppm LEL: 4 mg/kg/day 0 ppm LIST B Cancer. C(q) (HED)	Incr incidence of tions, decr in implant viability due to sperm alterations; Evidence of carcinogenicity in male rats (kidney tumor).	PADI UF: 100 OPPADI: 0.002 RFD: 0.002 WHOADI: 0 QSTAR: 0.11	Chronic feeding- dog Developmental tox-	HED reviewed 06/30/86 EPA pending 09/16/86 HED reassess 03/17/87 EPA deferred 04/15/87 EPA verified 03/23/88 On IRIS.
Monocrotophos (Azodrin) CAS: 6923-22-4 EPA Chem Code: 058901 CASWELL: 377 CFR: 180.296 CFR185: 185.2250 REG_GROUP:	2yr feeding- rat NOEL: 0.0045 mg/kg/day 0.09 ppm LEL: 0.045 mg/kg/day 0.9 ppm LIST A - Cancer.	Decreased plasma, and brain ChE. No evidence of enicity in rats or mice. Negative- 2	PADI UF: 100 OPPADI: 0.00005 RFD: 0 WHOADI: 0.0006 QSTAR: 0	Developmental tox- (Core-Supplementary).	HED reviewed 05/02/86 HED reassess 01/16/87 EPA pending 06/10/86- for CHE inhibition. WHO reviewed 1993
Monuron (Chlorfenidim) CAS: 150-68-5 EPA Chem Code: 035501 CASWELL: 583 CFR: CFR185: REG_GROUP:	NOEL: 0 mg/kg/day 0 ppm LEL: 0 mg/kg/day 0 ppm LIST A - Cancer.		UF: 0 OPPADI: 0 RFD: 0 WHOADI: 0 QSTAR: 0		
Monuron TCA (Urox) CAS: 140-41-0 EPA Chem Code: 035502 CASWELL: 583A CFR: CFR185: REG GROUP:	NOEL: 0 mg/kg/day 0 ppm LEL: 0 mg/kg/day 0 ppm LIST A - Cancer.		UF: 0 OPPADI: 0 RFD: 0 WHOADI: 0 QSTAR: 0	[Syn. Urox]	

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CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Myclobutanil (Systane/Rally) CAS: 88671-89-0 EPA Chem Code: 128857 CASWELL: 723K CFR: 180.443 CFR185: 185.4350 REG_GROUP:	2yr feeding- rat NOEL: 2.49 mg/kg/day 50 ppm LEL: 9.84 mg/kg/day 200 ppm Cancer: E (RfD/PR	Testicular atrophy. No evidence of enicity in rats or mice.	ADI UF: 100 OPPADI: 0.025 RFD: 0 WHOADI: 0.03 QSTAR: 0	No data gaps.	HED reviewed 01/27/88 EPA verified 02/25/88 WHO reviewed 1992 RfD/PR reviewed EPA deferred 04/28/94 On IRIS.
Nabam CAS: 142-59-6 EPA Chem Code: 014503 CASWELL: 585 CFR: CFR185: REG_GROUP:	NOEL: 0 mg/kg/day 0 ppm LEL: 0 mg/kg/day 0 ppm LIST A - No Cancer.	Since this chemical is not intended for food uses & since chronic or life time exposure is an unlikely scenario, an was not established.	UF: 0 OPPADI: 0 RFD: 0 WHOADI: 0 QSTAR: 0	Ethylene thiourea (ETU) is a possible plant metabolite for this chemical.	WHO reviewed 1983; not established. HED reviewed 10/15/86 EPA deferred 12/09/86 RfD/PR reviewed
Naled (Dibrom) CAS: 300-76-5 EPA Chem Code: 034401 CASWELL: 586 CFR: 180.215 CFR185: REG_GROUP:	2yr feeding- rat NOEL: 0.2 mg/kg/day 0 ppm LEL: 2 mg/kg/day 0 ppm LIST A (6A) Cancer: E (RfD/PR	Brain, plasma & RBC inhibition. No evidence of enicity in rats or mice.	ADI UF: 100 OPPADI: 0.002 RFD: 0.002 WHOADI: 0 QSTAR: 0	No data gaps. 1-Yr dog study is tical: NOEL/LEL for Brain (F), plasma & RBC (M & is 0.2 & 2 mg/kg/day, respectively.	EPA verified 07/22/86 HED reassess 03/17/87 EPA verified 04/15/87 RfD/PR reviewed EPA verified 12/09/94 On IRIS.
Naphthalene CAS: 91-20-3 EPA Chem Code: 055801 CASWELL: 587 CFR: CFR185: REG_GROUP:	NOEL: 0 mg/kg/day 0 ppm LEL: 0 mg/kg/day 0 ppm LIST A (6A) Cancer.		UF: 0 OPPADI: 0 RFD: 0 WHOADI: 0 QSTAR: 0	No food use.	EPA deferred 03/19/87 EPA deferred 10/19/89 EPA deferred 09/22/93 EPA deferred 08/03/94
Napropamide CAS: 15299-99-7 EPA Chem Code: 103001 CASWELL: 590A CFR: 180.328 CFR185: REG GROUP:	3gen reprod- rat NOEL: 30 mg/kg/day 0 ppm LEL: 100 mg/kg/day 0 ppm LIST B Cancer: Negative- 2	Decreased body weight gain in pups and No evidence of enicity in rats or mice.	PADI UF: 300 OPPADI: 0.1 RFD: 0.1 WHOADI: 0 QSTAR: 0	Chronic feeding- dog Developmental tox-	HED reviewed 01/06/89 EPA verified 04/20/89 On IRIS.

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CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Naptalam (Alanap-1) CAS: 132-66-1 EPA Chem Code: 030702 CASWELL: 592 CFR: 180.297 CFR185: REG_GROUP:	1yr feeding- dog NOEL: 5.3 mg/kg/day 200 ppm LEL: 25.8 mg/kg/day 1000 ppm LIST A (6B) Cancer: D (RfD/PR	Incr liver-to-body wt ratio in females. NOEL/LEL in males - & 121 mg/kg based on liver-to-body wt ratio.	PADI UF: 100 OPPADI: 0.053 RFD: 0 WHOADI: 0 QSTAR: 0	Carcinogenicity- mouse Developmental tox- rat (current study maybe graded) RfD developed using from naptalam acid &	AD hoc meeting RfD/PR reviewed
Naptalam, sodium salt CAS: 132-67-2 EPA Chem Code: 030703 CASWELL: 780A CFR: 180.297 CFR185: REG_GROUP:	1yr feeding- dog NOEL: 5.3 mg/kg/day 200 ppm LEL: 25.8 mg/kg/day 1000 ppm LIST A Cancer: D (RfD/PR	Incr liver-to-body wt ratio in females. NOEL/LEL in males - & 121 mg/kg based on liver-to-body wt ratio.	PADI UF: 100 OPPADI: 0.053 RFD: 0 WHOADI: 0 QSTAR: 0	Carcinogenicity - mouse Developmental tox- rat (current study maybe graded). RfD developed using from naptalam acid &	Ad hoc meeting RfD/PR reviewed
Napthaleneacetic acid (NAA) CAS: 86-87-3 EPA Chem Code: 056002 CASWELL: 589 CFR: 180.155 CFR185: REG_GROUP:	6mo feeding- dog NOEL: 50 mg/kg/day 2000 ppm LEL: 0 mg/kg/day 0 ppm LIST A (6A) Cancer:		PADI UF: 1000 OPPADI: 0.05 RFD: 0 WHOADI: 0 QSTAR: 0	Critical study and data base not reviewed by RfD/PR Committee.	RFD NOT VERIFIED BY AGENCY COMMITTEES.
Neodecanoic acid CAS: 26896-20-8 EPA Chem Code: 097501 CASWELL: 365A CFR: 180.248 CFR185: REG_GROUP:	NOEL: 0 mg/kg/day 0 ppm LEL: 0 mg/kg/day 0 ppm Cancer:		UF: 0 OPPADI: 0 RFD: 0 WHOADI: 0 QSTAR: 0		
Nicosulfuron (Accent) CAS: 111991-09-4 EPA Chem Code: 129008 CASWELL: 359J CFR: 180.454 CFR185: REG GROUP:	1yr feeding- dog NOEL: 125 mg/kg/day 5000 ppm LEL: 500 mg/kg/day 20000 ppm Newchemical Cancer: E (HCPRC)	Decreased body wt increased relative liver & kidney weights. ogenicity classif submission of historical control information.	ADI UF: 100 OPPADI: 1.25 RFD: 0 WHOADI: 0 QSTAR: 0	No data gaps. Does not require mental Peer Review	RfD/PR reviewed

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CHEMICAL	STUDY TYPE		EFFECTS	REFERENCE DOSES		DATA GAPS/COMMENTS	STATUS
Nicotine				UF:	0	Inadequate data base	Ad hoc meeting
CAS: 54-11-5	NOEL:	0 mg/kg/day		OPPADI:	0	RfD derivation.	
EPA Chem Code: 056702		0 ppm		RFD:	0		
CASWELL: 597	LEL:	0 mg/kg/day		WHOADI:	0		
CFR: 180.167		0 ppm		QSTAR:	0		
CFR185:							
REG_GROUP:	LIST B	Cancer.					
Nitralin				UF:	0		
CAS: 4726-14-1	NOEL:	0 mg/kg/day		OPPADI:	0		
EPA Chem Code: 037601		0 ppm		RFD:	0		
CASWELL: 578	LEL:	0 mg/kg/day		WHOADI:	0		
CFR: 180.237		0 ppm		QSTAR:	0		
CFR185:							
REG_GROUP:	Cancer.						
Nitrapyrin	1yr feeding- dog		Incr levels of cholester-	PADI UF:	100	Developmental tox- rat	HED reviewed 09/05/86
CAS: 1929-82-4	NOEL:	3 mg/kg/day	ol & ALP; Liver weight	OPPADI:	0.03	(core supplementary)	EPA verified 09/29/86
EPA Chem Code: 069203		0 ppm	changes; liver	RFD:	0.03	Oncogenicity- mouse	RfD/PR reviewed
CASWELL: 217	LEL:	15 mg/kg/day	ology; Evidence of carc-	WHOADI:	0	(core	RfD/PR reviewed
CFR: 180.350		0 ppm	inogenicity in male rats	QSTAR:	0	not high enough)	EPA verified 05/27/92
CFR185:			(kidney tumor).				On IRIS.
REG_GROUP:	LIST A (6B)	Cancer. D (HED)					
Nitrofen			Cancelled. Positive	UF:	0		WHO reviewed 1983;
CAS: 1836-75-5	NOEL:	0 mg/kg/day	carcinogen.	OPPADI:	0		not established.
EPA Chem Code: 038201		0 ppm		RFD:	0		
CASWELL: 323D	LEL:	0 mg/kg/day		WHOADI:	0		
CFR: 180.223		0 ppm		QSTAR:	0		
CFR185:							
REG_GROUP:	Cancelled	Cancer. 2B (IARC)					
Nitrogen, liquid				UF:			
CAS: 7727-37-9	NOEL:	0 mg/kg/day		OPPADI:	0		
EPA Chem Code: 128934		0 ppm		RFD:	0		
CASWELL:	LEL:	0 mg/kg/day		WHOADI:	0		
CFR: 180.1050		0 ppm		QSTAR:	0		
CFR185: 185.4400							
REG GROUP:	Cancer.						

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CHEMICAL	STUDY TYPE		EFFECTS	REFERENCE DOSES		DATA GAPS/COMMENTS	STATUS
Norea (Noruron)				UF:	0		
CAS: 18530-56-8	NOEL:	0 mg/kg/day		OPPADI:	0		
EPA Chem Code: 035801		0 ppm		RFD:	0		
CASWELL: 607	LEL:	0 mg/kg/day		WHOADI:	0		
CFR: 180.260		0 ppm		QSTAR:	0		
CFR185: 185.4450							
REG_GROUP:	LIST D	Cancer.					
Norflurazon	6mo feeding- dog		Incr absolute & relative	ADI UF:	100	No data gaps.	HED reviewed 06/13/86
CAS: 27314-13-2	NOEL:	1.53 mg/kg/day	liver wt & incr cholest-	OPPADI:	0.02		EPA verified 07/08/86
EPA Chem Code: 105801		50 ppm	erol in both sexes.	RFD:	0.04		RfD/PR reviewed
CASWELL: 195AA	LEL:	5.02 mg/kg/day	Evidence of	WHOADI:	0		
CFR: 180.356		150 ppm	ity in mice (hepatoma);	QSTAR:	0		
CFR185:			Negative in rats.				On IRIS.
REG_GROUP:	LIST A (5	Cancer. C (HED)					
OPBA (Thenarasazine oxide)				UF:			
CAS: 58-36-6	NOEL:	0 mg/kg/day		OPPADI:	0		
EPA Chem Code: 012601		0 ppm		RFD:	0		
CASWELL: 626B	LEL:	0 mg/kg/day		WHOADI:	0		
CFR:		0 ppm		QSTAR:	0		
CFR185:							
REG_GROUP:	List A Cancer.						
Octhilinone				UF:	0		
CAS: 26530-20-1	NOEL:	0 mg/kg/day		OPPADI:	0		
EPA Chem Code: 099901		0 ppm		RFD:	0		
CASWELL: 613C	LEL:	0 mg/kg/day		WHOADI:	0		
CFR: 180.366		0 ppm		QSTAR:	0		
CFR185:							
REG_GROUP:	LIST B	Cancer.					
Omacide (IPBC)			Since this chemical is	UF:		Chemical is also called	RfD/PR reviewed
CAS: 55406-53-6	NOEL:	mg/kg/day	not intended for food	OPPADI:		Troysan polyphase by	
EPA Chem Code: 107801		ppm	uses & since chronic or	RFD:		another registrant. The	
CASWELL: 501A	LEL:	mg/kg/day	life time exposure is an	WHOADI:		registrant for Omacide	
CFR:		ppm	unlikely scenario, an	QSTAR:		only seeking non-food	
CFR185:			was not established.			tolerances at this time.	
REG GROUP:	Newchemical	Cancer.					

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CHEMICAL	STUDY TYPE			EFFECTS	REFERENCE DOSES		DATA GAPS/COMMENTS	STATUS
Omethoate					UF:	0		WHO reviewed 1985
CAS: 113-02-6	NOEL:	0	mg/kg/day		OPPADI:	0		
EPA Chem Code: 035002		0	ppm		RFD:	0		
CASWELL: 368B	LEL:	0	mg/kg/day		WHOADI:	0.0003		
CFR:		0	ppm		QSTAR:	0		
CFR185:								
REG_GROUP:	Cancer.							
Orthophenylphenol (OPP)					UF:	100	RfD/PR Committee	WHO reviewed 1990
CAS: 90-43-7	NOEL:	0	mg/kg/day		OPPADI:	0	ed tox reviewer to	Ad hoc meeting
EPA Chem Code: 064103		0	ppm		RFD:	0	study used in establish-	RfD/PR reviewed
CASWELL: 623AA	LEL:	0	mg/kg/day		WHOADI:	0.02	ing the WHO ADI &	
CFR: 180.129		0	ppm		QSTAR:	0	RfD will be	
CFR185:								
REG_GROUP:	LIST B Cancer.			B2 (HCPRC);				
Oryzalin	2yr feeding-rat			Decreases in	ADI UF:	100	No data gaps.	HED reviewed 03/07/86
CAS: 19044-88-3	NOEL:	12.16	mg/kg/day	parameters in F; incr.	OPPADI:	0.12	Repro studies are	EPA verified 03/26/86
EPA Chem Code: 104201		300	ppm	liver & kidney weights in	RFD:	0.05	tical. 2-Gen: NOEL=12.5	HED reassess 12/05/88
CASWELL: 623A	LEL:	36.86	mg/kg/day	M & F. Evidence of	WHOADI:	0	mg/kg; LEL=37.5 mg/kg.	EPA verified 04/20/89
CFR: 180.304		900	ppm	inogenicity in rat	QSTAR:	0.13	Gen: LEL=19.4 mg/kg	RfD/PR reviewed
CFR185: 185.4550				ary); negative in mouse.				On IRIS.
REG_GROUP:	LIST A (6C) Cancer.			C(q) (HED); C				
Ovex (Chlorfenson)					UF:	0		WHO reviewed 1965
CAS: 80-33-1	NOEL:	0	mg/kg/day		OPPADI:	0		
EPA Chem Code: 020201		0	ppm		RFD:	0		
CASWELL: 624	LEL:	0	mg/kg/day		WHOADI:	0.01		
CFR: 180.134		0	ppm		QSTAR:	0		
CFR185:								
REG_GROUP:	Cancer.							
Oxadiazon	2yr feeding-rat			Increased liver weights	ADI UF:	100	No data gaps.	HED reviewed 08/15/86
CAS: 19666-30-9	NOEL:	0.5	mg/kg/day	& serum protein.	OPPADI:	0.005		EPA verified 02/18/87
EPA Chem Code: 109001		10	ppm		RFD:	0.005		
CASWELL: 624A	LEL:	5	mg/kg/day	Evidence of	WHOADI:	0		
CFR: 180.346		100	ppm	ity (liver tumors) in	QSTAR:	0.14		
CFR185:				rats & mice.				On IRIS.
REG GROUP:	LIST B Cancer.			C(q) (HED); C				

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CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Oxadixyl (San 371F) CAS: 77732-09-3 EPA Chem Code: 126701 CASWELL: 731C CFR: 180.456 CFR185: REG_GROUP:	2yr feeding- rat NOEL: 10.9 mg/kg/day 250 ppm LEL: 44.79 mg/kg/day 1000 ppm Newchemical Cancer: C(q) (HED) C	Incr liver weights in M; decr body gain in F. Evidence of ity in rats (M&F; liver); negative for mice.	ADI UF: 100 OPPADI: 0.11 RFD: 0 WHOADI: 0 QSTAR: 0.053	No data gaps.	HED reviewed 01/04/90 HED reviewed 04/11/90 EPA deferred 07/25/90 [OPP to address other effects in the critical study]
Oxamyl (Vydate) CAS: 23135-22-0 EPA Chem Code: 103801 CASWELL: 561A CFR: 180.303 CFR185: REG_GROUP:	Develop tox- rat NOEL: 0.2 mg/kg/day 0 ppm LEL: 0.5 mg/kg/day 0 ppm LIST A (6C) Cancer: Not likely (RFDC)	Decreased fetal body weight No evidence of enicity in rats or mice.	PADI UF: 1000 OPPADI: 0.0002 RFD: 0.025 WHOADI: 0.03 QSTAR: 0	Chronic feeding- dog (Study is Extra UF of 10 used to account for no neurotox data and no NOEL in 1yr dog study.	WHO reviewed 1985 HED reviewed 10/24/86 EPA verified 12/09/86 RfD/PR reviewed On IRIS.
Oxydemeton-methyl CAS: 301-12-2 EPA Chem Code: 058702 CASWELL: 455 CFR: 180.330 CFR185: REG_GROUP:	2gen reprod- rat NOEL: 0.05 mg/kg/day 1 ppm LEL: 0.5 mg/kg/day 10 ppm LIST A (6C) Cancer: Insufficient data.	Decr parental body wts testis wt; incr pup mortality.	UF: 100 OPPADI: 0.0005 RFD: 0 WHOADI: 0.0003 QSTAR: 0	Critical study and data base not reviewed by RfD/PR Committee. RfD value taken from Registration Standard. (Syn. Metasystox-R)	WHO reviewed 1989; ated under Demeton-s-methyl & related
Oxyfluorfen (Goal) CAS: 42874-03-3 EPA Chem Code: 111601 CASWELL: 188AAA CFR: 180.381 CFR185: 185.4600 REG_GROUP:	20mo feeding- mice NOEL: 0.3 mg/kg/day 2 ppm LEL: 3 mg/kg/day 20 ppm LIST B Cancer: C(q) (HCPRC)	Necrosis, hyperplastic nodules in liver, increased liver weights. Evidence of ity (liver tumors) in mice.	ADI UF: 100 OPPADI: 0.003 RFD: 0.003 WHOADI: 0 QSTAR: 0.128	No data gaps. Mouse most sensitive species.	HED reviewed 04/14/86 EPA verified 06/10/86 On IRIS.
Oxytetracycline CAS: 2058-46-0 EPA Chem Code: 006308 CASWELL: 628 CFR: 180.337 CFR185: REG GROUP:	Subchronic feed- NOEL: 0.05 mg/kg/day 0 ppm LEL: 0.25 mg/kg/day 0 ppm LIST A (6C) Cancer: D (RfD/PR	Shift in drug susceptibility/resistance of enteric lactose-fermenting organisms.	PADI UF: 10 OPPADI: 0.005 RFD: 0 WHOADI: 0 QSTAR: 0	Developmental tox - 2 Reproduction - rat Reproduction- rat Extra UF not needed several studies are present, also is human	HED reviewed 03/03/87 RfD/PR reviewed

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CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Oxythioquinox (Morestan) CAS: 2439-01-2 EPA Chem Code: 054101 CASWELL: 576 CFR: 180.338 CFR185: REG_GROUP:	1yr feeding- dog NOEL: 0.625 mg/kg/day 25 ppm LEL: 1.88 mg/kg/day 75 ppm LIST B Cancer: B2 (HCPRC)	Liver kupffer cells & extamedullary tic nodules in males. Evidence of ity in mice (lung) & rats (liver & kidney).	UF: 100 OPPADI: 0.006 RFD: 0 WHOADI: 0.006 QSTAR: 0	Critical study and data base not reviewed by RfD/PR Committee. [Syn. Chinomethionate]	WHO reviewed 1987 Ad hoc meeting
Paclobutrazol CAS: 76738-62-0 EPA Chem Code: 125601 CASWELL: 628C CFR: CFR185: REG_GROUP:	2gen reprod- rat NOEL: 2.5 mg/kg/day 50 ppm LEL: 12.5 mg/kg/day 250 ppm Cancer: D (RfD/PR	Increased incidence of chromodacryorrhea & kened eyelids Reproductive effect).	ADI UF: 100 OPPADI: 0.025 RFD: 0.013 WHOADI: 0.01 QSTAR: 0	No data gaps.	HED reviewed 07/25/86 EPA verified 09/02/86 WHO reviewed 1988 RfD/PR reviewed On IRIS.
Paradichlorobenzene CAS: 106-46-7 EPA Chem Code: 061501 CASWELL: 632 CFR: CFR185: REG_GROUP:	NOEL: 0 mg/kg/day 0 ppm LEL: 0 mg/kg/day 0 ppm LIST C Cancer: C (HED); C (SAB)		UF: 0 OPPADI: 0 RFD: 0 WHOADI: 0 QSTAR: 0	[Syn.	
Paraformaldehyde CAS: 30525-89-4 EPA Chem Code: 043002 CASWELL: 633 CFR: CFR185: 185.4650 REG_GROUP:	2y feeding- rat NOEL: 15 mg/kg/day 0 ppm LEL: 82 mg/kg/day 0 ppm LIST A Cancer:	Reduced weight gain, histopathology in rats.	UF: 100 OPPADI: 0 RFD: 0.2 WHOADI: 0 QSTAR: 0	RfD is based on data for Formaldehyde.	EPA verified 06/20/90 Ad hoc meeting
Paranitrophenol CAS: 100-02-7 EPA Chem Code: 056301 CASWELL: 603 CFR: CFR185: REG GROUP:	NOEL: 0 mg/kg/day 0 ppm LEL: 0 mg/kg/day 0 ppm LIST B Cancer: D (RfD/PR	No evidence of enicity in mice.	UF: 0 OPPADI: 0 RFD: 0 WHOADI: 0 QSTAR: 0	Since this chemical is not intended for food uses & since chronic or lifetime exposure is an unlikely scenario, an was not established.	EPA deferred 04/18/90 EPA deferred 02/20/91 RfD/PR reviewed

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CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Paraquat dichloride CAS: 1910-42-5 EPA Chem Code: 061601 CASWELL: 634 CFR: 180.205 CFR185: 185.4700 REG_GROUP:	1yr feeding- dog NOEL: 0.45 mg/kg/day 15 ppm LEL: 0.93 mg/kg/day 30 ppm LIST A (6C) Cancer: E (HED); D (SAP)	Chronic pneumonitis. No evidence of enicity in rats or mice.	ADI UF: 100 OPPADI: 0.0045 RFD: 0.0045 WHOADI: 0.004 QSTAR: 0	No data gaps.	WHO reviewed 1986; as Paraquat ion. HED reviewed 02/21/86 EPA verified 03/11/86 RfD/PR reviewed On IRIS.
Parathion (Ethyl parathion) CAS: 56-38-2 EPA Chem Code: 057501 CASWELL: 637 CFR: 180.121 CFR185: REG_GROUP:	1yr feeding- dog NOEL: 0 mg/kg/day 0 ppm LEL: 0.01 mg/kg/day 0 ppm LIST A Cancer: C (HED/CRAVE)	Plasma, RBC ChE inhibition; no NOEL. Evidence of ity in rats (adrenal cortex); negative in mice.	PADI UF: 30 OPPADI: 0.00033 RFD: 0 WHOADI: 0.005 QSTAR: 0	LEL used for ADI. No data gaps. Extra UF of 3 used for lack of NOEL in critical study.	WHO reviewed 1967 HED reviewed 03/07/86 EPA deferred 11/25/86 Pending RAC approval RAF ChE report.
Pebulate (Tillam) CAS: 1114-71-2 EPA Chem Code: 041403 CASWELL: 710 CFR: 180.238 CFR185: REG_GROUP:	2yr feeding- rat NOEL: 0.74 mg/kg/day 15 ppm LEL: 7.12 mg/kg/day 150 ppm LIST B Cancer:	Decreased body wt in increased incidence of cataracts in M/F.	UF: 100 OPPADI: 0.007 RFD: 0 WHOADI: 0 QSTAR: 0	Critical study and data base not reviewed by RfD/PR Committee.	Ad hoc meeting
Pendimethalin (Prowl) CAS: 40487-42-1 EPA Chem Code: 108501 CASWELL: 454BB CFR: 180.361 CFR185: REG_GROUP:	56-day & 14-day- NOEL: 10 mg/kg/day 100 ppm LEL: 31 mg/kg/day 500 ppm LIST A (6B) Cancer: C (HCPRC)	Hormonal and histologic thyroid changes. NOEL/LEL values were ived from 3 studies.	ADI UF: 100 OPPADI: 0.1 RFD: 0.04 WHOADI: 0 QSTAR: 0	No data gaps.	HED reviewed 07/25/86 EPA deferred 08/19/86 EPA verified 09/16/87 RfD/PR reveiwed RfD/PR reviewed On IRIS.
Pentachloronitrobezene CAS: 82-68-8 EPA Chem Code: 056502 CASWELL: 640 CFR: 180.291 CFR185: REG GROUP:	2yr feeding- dog NOEL: 0.75 mg/kg/day 30 ppm LEL: 4.5 mg/kg/day 180 ppm LIST A (6C) Cancer: C (HED)	Cholestatic hepatitis and secondary bile No adequate ity studies are available	PADI UF: 300 OPPADI: 0.003 RFD: 0.003 WHOADI: 0.007 QSTAR: 0	Developmental tox- (core supplementary) [Syn. PCNB,	WHO reviewed 1977 HED reviewed 07/18/86 EPA verified 08/18/86 HED reviewed 03/17/87 EPA verified 04/15/87 On IRIS.

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CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Pentachlorophenol	2yr feeding-rat	Liver & kidney	UF: 100	Critical study and data	EPA verified 05/20/85
CAS: 87-86-5	NOEL: 3 mg/kg/day		OPPADI: 0	base not reviewed by	
EPA Chem Code: 063001	0 ppm		RFD: 0.03	RfD/PR Committee.	
CASWELL: 641	LEL: 10 mg/kg/day		WHOADI: 0		
CFR:	0 ppm	2B IARC	QSTAR: 0.129		
CFR185:		No HED Peer Review			On IRIS.
REG_GROUP:	LIST B Cancer: B2				
Perfluidone	28d feeding-rat	Decr mean body weight,	PADI UF: 3000	Not registered.	Ad hoc meeting
CAS: 37924-13-3	NOEL: 30 mg/kg/day	ataxia, piloerection, &	OPPADI: 0.01	All tolerances revoked	
EPA Chem Code: 108001	600 ppm	prostration.	RFD: 0	1993.	
CASWELL: 539C	LEL: 41 mg/kg/day		WHOADI: 0		
CFR: 180.165	820 ppm		QSTAR: 0		
CFR185:					
REG_GROUP:	LIST A - Cancer:				
Permethrin	2yr feeding-rat	Increased liver weights.	ADI UF: 100	No data gaps.	HED reviewed 09/12/86
CAS: 52645-53-1	NOEL: 5 mg/kg/day		OPPADI: 0.05		EPA verified 10/28/86
EPA Chem Code: 109701	100 ppm		RFD: 0.05		WHO reviewed 1987;
CASWELL: 652BB	LEL: 25 mg/kg/day	Evidence of	WHOADI: 0.05		extended to 25:75
CFR: 180.378	500 ppm	ity in mice (liver, lung)	QSTAR: 0.0184		
CFR185:		negative in rat.			On IRIS.
REG_GROUP:	LIST B Cancer: C(q) (HED); C				
Phenarsazine oxide			UF: 0		Ad hoc meeting
CAS: 4095-45-8	NOEL: 0 mg/kg/day		OPPADI: 0		
EPA Chem Code: 012602	0 ppm		RFD: 0		
CASWELL: 626	LEL: 0 mg/kg/day		WHOADI: 0		
CFR:	0 ppm		QSTAR: 0		
CFR185:					
REG_GROUP:	LIST A - No Cancer:				
Phenmedipham (Betanal)	2yr feeding-rat	Minimal decrease in	PADI UF: 100	Reproduction-rat	HED reviewed 07/25/86
CAS: 13684-63-4	NOEL: 25 mg/kg/day	weight gain in females	OPPADI: 0.25	Developmental tox-rat	HED reviewed 12/16/86
EPA Chem Code: 098701	500 ppm	the high-dose.	RFD: 0.25	(study under review).	HED reviewed 03/03/87
CASWELL: 648B	LEL: 0 mg/kg/day		WHOADI: 0	Developmental tox-	EPA verified 03/21/90
CFR: 180.278	0 ppm	No valid carcinogenicity	QSTAR: 0	Carcinogenicity-mouse	RfD/Pr reviewed
CFR185:		studies are available.		Reg. Std. 10/86.	On IRIS.
REG GROUP:	LIST A (6C) Cancer: D (RfD/PR				

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CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Phenthoate			UF: 0		WHO reviewed 1984
CAS: 2597-03-7	NOEL: 0 mg/kg/day		OPPADI: 0		
EPA Chem Code: 104901	0 ppm		RFD: 0		
CASWELL: 427B	LEL: 0 mg/kg/day		WHOADI: 0.003		
CFR:	0 ppm		QSTAR: 0		
CFR185:					
REG_GROUP:	LIST B Cancer:				
Phorate (Thimet)	1yr feeding-dog	Brain ChE inhibition;	ADI UF: 100	No data gaps.	WHO reviewed 1985
CAS: 298-02-2	NOEL: 0.05 mg/kg/day	slight tremors in M&F,	OPPADI: 0.0005		HED reviewed 06/13/86
EPA Chem Code: 057201	0 ppm	marginal inhibition of	RFD: 0		EPA deferred 08/05/86
CASWELL: 660	LEL: 0.25 mg/kg/day	body weight gain in M.	WHOADI: 0.0002	RfD Pending RAC	HED reviewed 05/05/88
CFR: 180.206	0 ppm	No evidence of	QSTAR: 0	of RAF ChE report.	EPA deferred 07/20/88
CFR185:		enicity in rats or mice.			RfD/PR reviewed
REG_GROUP:	LIST A (4 Cancer: E (RfD/PR				
Phosalone	6mo feeding-dog	Plasma ChE depression,	ADI UF: 100	No data gaps.	HED reviewed 03/07/86
CAS: 2310-17-0	NOEL: 0 mg/kg/day	NOEL not established.	OPPADI: 0.0025	UF of 100 used due to	EPA deferred 03/26/86
EPA Chem Code: 097701	0 ppm		RFD: 0	lack of NOEL in critical	EPA deferred 12/16/86
CASWELL: 660A	LEL: 0.25 mg/kg/day		WHOADI: 0.001	study.	WHO reviewed 1993
CFR: 180.263	10 ppm	No evidence of	QSTAR: 0		
CFR185: 185.4800		enicity in rats or mice.			
REG_GROUP:	LIST A - Cancer: Negative - 2				
Phosmet (Imidan)	2yr feeding-rat	RBC & serum ChE	ADI UF: 100	No data gaps.	WHO reviewed 1979
CAS: 732-11-6	NOEL: 1.1 mg/kg/day	ion.	OPPADI: 0.01		EPA verified 06/10/86
EPA Chem Code: 059201	20 ppm		RFD: 0.02		HED reviewed 10/21/86
CASWELL: 543	LEL: 1.8 mg/kg/day	Evidence of	WHOADI: 0.02		HED reviewed 03/04/88
CFR: 180.261	40 ppm	ity in mice (liver);	QSTAR: 0		RfD/PR reviewed
CFR185: 185.3950		negative in rat.		Registration Std. 9/86.	On IRIS
REG_GROUP:	LIST A (6B) Cancer: Tentative C (HED)				
Phosphamidon	2yr feeding-rat	Inhibition of serum and	PADI UF: 300	Chronic feeding-dog	WHO reviewed 1986
CAS: 13171-21-6	NOEL: 0.05 mg/kg/day	brain ChE activity, de-	OPPADI: 0.0002	Oncogenicity-mouse	HED reviewed 07/31/87
EPA Chem Code: 018201	1 ppm	generation/necrosis of	RFD: 0		
CASWELL: 661	LEL: 1.5 mg/kg/day	hepatocytes. Evidence	WHOADI: 0.0005		
CFR: 180.239	30 ppm	carcinogenicity in rats	QSTAR: 0		
CFR185:		(bladder); no mouse			
REG GROUP:	LIST A - Cancer: C (HED)				

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CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Phostebupirim (Bay mat 7484) CAS: 96182-53-5 EPA Chem Code: 129086 CASWELL: 956 CFR: CFR185: REG_GROUP:	1yr feeding- dog NOEL: 0.02 mg/kg/day 0.7 ppm LEL: 0.13 mg/kg/day 5 ppm Newchemical Cancer: E (RfD/PR	Plasma, erythrocyte, & brain ChE inhibition. No evidence of enicity in rats or mice.	ADI UF: 100 OPPADI: 0.0002 RFD: 0 WHOADI: 0 QSTAR: 0	No data gaps.	RfD/PR reviewed RfD/PR reviewed
Picloram (+ salts) CAS: 1918-02-1 EPA Chem Code: 005101 CASWELL: 039 CFR: 180.292 CFR185: 185.4850 REG_GROUP:	2yr feeding - rat NOEL: 20 mg/kg/day 0 ppm LEL: 60 mg/kg/day 0 ppm LIST A Cancer: E (RfD/PR	Altered size & tinctorial properties of centrilobular hepatocytes in M & No evidence of enicity in rats or mice.	ADI UF: 100 OPPADI: 0.2 RFD: 0.07 WHOADI: 0 QSTAR: 0	No data gaps. Data base also included studies on Picloram Triisopropanolamine salt, Ehtylhexyl ester of Picloram & Picloram K+ salt.	HED reviewed 03/31/86 EPA verified 05/30/86 HED reassess 03/20/87 EPA verified 04/15/87 RfD/PR reviewed On IRIS.
Piperonyl butoxide CAS: 51-03-6 EPA Chem Code: 067501 CASWELL: 670 CFR: 180.127 CFR185: 185.4900 REG_GROUP:	1yr feeding- dog NOEL: 17.5 mg/kg/day 700 ppm LEL: 0 mg/kg/day 0 ppm LIST B Cancer: C (HCPRC)	Evidence of ity in mice (liver).	PADI UF: 1000 OPPADI: 0.0175 RFD: 0 WHOADI: 0.03 QSTAR: 0	Critical study and data base not reviewed by RfD/PR Committee.	WHO reviewed 1992
Chlorfenapyr (Pirate) CAS: 122453-73-0 EPA Chem Code: 129093 CASWELL: CFR: CFR185: REG_GROUP:	80wk feeding- NOEL: 2.8 mg/kg/day 20 ppm LEL: 16.6 mg/kg/day 120 ppm Newchemical Cancer: CND - Suggestive	Non-neoplastic brain uolation (M & F); Scabbing of the skin (M).	PADI UF: 1000 OPPADI: 0.003 RFD: WHOADI: QSTAR:	Chronic feeding- mouse (current study is mentary).	RfD/PR reviewed Ad Hoc Meeting
Pirimicarb CAS: 23103-98-2 EPA Chem Code: 106101 CASWELL: 359C CFR: 180.365 CFR185: REG GROUP:	NOEL: 0 mg/kg/day 0 ppm LEL: 0 mg/kg/day 0 ppm NewChemical Cancer:		UF: 0 OPPADI: 0 RFD: 0 WHOADI: 0.02 QSTAR: 0	Since this chemical is not intended for food uses & since chronic or life time exposure is an likely scenario, an RfD was not established.	WHO reviewed 1982 RfD/PR reviewed RfD/PR reviewed

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CHEMICAL	STUDY TYPE		EFFECTS	REFERENCE DOSES		DATA GAPS/COMMENTS	STATUS
Pirimiphos-ethyl				UF:	0		
CAS: 23505-41-1	NOEL:	0 mg/kg/day		OPPADI:	0		
EPA Chem Code: 108101		0 ppm		RFD:	0		
CASWELL: 334A	LEL:	0 mg/kg/day		WHOADI:	0		
CFR: 180.308		0 ppm		QSTAR:	0		
CFR185:							
REG_GROUP:	LIST B	Cancer.					
Pirimiphos-methyl	Human 54 day		Marginal effect on	ADI UF:	25	No data gaps.	WHO reviewed 1974
CAS: 29232-93-7	NOEL:	0.25 mg/kg/day	ChE, only dose tested.	OPPADI:	0.01	UF of 25 used because	WHO reviewed 1976
EPA Chem Code: 108102		0 ppm	Extra safety factor due	RFD:	0.01	true NOEL was found in	HED reviewed 05/19/86
CASWELL: 334B	LEL:	0 mg/kg/day	to lack of true NOEL.	WHOADI:	0.03	the human study,	EPA verified 08/19/86
CFR: 180.409		0 ppm	No evidence of	QSTAR:	0	with WHO ADI.	WHO reviewed 1992
CFR185: 185.4950			enicity in rats or mice.				On IRIS.
REG_GROUP:	LIST B	Cancer. Negative- 2					
Potassium arsenite				UF:	0		
CAS: 10124-50-2	NOEL:	0 mg/kg/day		OPPADI:	0		
EPA Chem Code: 013605		0 ppm		RFD:	0		
CASWELL: 682A	LEL:	0 mg/kg/day		WHOADI:	0		
CFR: 180.334		0 ppm		QSTAR:	0		
CFR185:							
REG_GROUP:	Cancer.						
Potassium bromide				UF:	0	No food use.	
CAS: 7758-02-3	NOEL:	0 mg/kg/day		OPPADI:	0	(Insufficient data for	
EPA Chem Code: 013903		0 ppm		RFD:	0	RfD determination).	
CASWELL: 684	LEL:	0 mg/kg/day		WHOADI:	0		
CFR:		0 ppm		QSTAR:	0		
CFR185:							
REG_GROUP:	LIST A -	Cancer.					
Potassium permanganate				UF:	0		
CAS: 7722-64-7	NOEL:	0 mg/kg/day		OPPADI:	0		
EPA Chem Code: 068501		0 ppm		RFD:	0		
CASWELL: 699	LEL:	0 mg/kg/day		WHOADI:	0		
CFR:		0 ppm		QSTAR:	0		
CFR185:							
REG GROUP:	LIST A -	Cancer.					

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CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Prallethrin (ETOC) CAS: 23031-36-9 EPA Chem Code: 128722 CASWELL: 704AA CFR: CFR185: REG_GROUP:	1yr feeding- dog NOEL: 5 mg/kg/day 0 ppm LEL: 10 mg/kg/day 0 ppm NewChemical Cancer: E (RfD/PR	Clinical signs; incr cholesterol & id levels & ALP activity. No evidence of enicity in rats or mice.	ADI UF: 100 OPPADI: 0.05 RFD: 0 WHOADI: 0 QSTAR: 0	No data gaps.	RfD/PR reviewed RfD/PR reviewed
Primisulfuron-methyl CAS: 86209-51-0 EPA Chem Code: 128973 CASWELL: 074C CFR: 180.452 CFR185: REG_GROUP:	80wk feeding- NOEL: 0 mg/kg/day 0 ppm LEL: 1.72 mg/kg/day 10 ppm Newchemical Cancer: D (HCPRC)	Incr in absolute & relative liver weights in (F); NOEL not established. Evidence of ity in mice (M&F; liver); negative in rats.	ADI UF: 300 OPPADI: 0.006 RFD: 0 WHOADI: 0 QSTAR: 0	No data gaps. [Syn. Beacon/Rifle]	HED reviewed 03/29/90 EPA deferred 07/25/90 EPA requests historical control information on female mouse liver wts.
Prochloraz CAS: 67747-09-5 EPA Chem Code: 128851 CASWELL: 704E CFR: CFR185: REG_GROUP:	2yr feeding- dog NOEL: 0.75 mg/kg/day 30 ppm LEL: 3.375 mg/kg/day 135 ppm Cancer: C(q) (HED); C	Increase in SAP and weights. Evidence of ity in M & F mice (liver tumors).	PADI UF: 100 OPPADI: 0.0075 RFD: 0.0075 WHOADI: 0.01 QSTAR: 0.15	Developmental tox-	WHO reviewed 1993 HED reviewed 07/01/88 EPA verified 07/20/88. On IRIS.
Procymidone (Sumilex) CAS: 32809-16-8 EPA Chem Code: 129044 CASWELL: 704J CFR: 180.455 CFR185: REG_GROUP:	Develop tox - rat NOEL: 3.5 mg/kg/day 0 ppm LEL: 12.5 mg/kg/day 0 ppm Newchemical Cancer: B2 (HED); C (SAP)	Reduced anogenital ance in males.	ADI UF: 100 OPPADI: 0.035 RFD: 0 WHOADI: 0.1 QSTAR: 0.0235	No data gaps. Rat reproduction study co-critical. NOEL=2.5 mg/kg; LEL=12.5 mg/kg	WHO reviewed 1989 RfD/PR reviewed
Prodiamine (Rydex) CAS: 29091-21-2 EPA Chem Code: 110201 CASWELL: 727A CFR: CFR185: REG GROUP:	NOEL: 0 mg/kg/day 0 ppm LEL: 0 mg/kg/day 0 ppm Newchemical Cancer: C (HED); C (SAP)	Evidence of ity in rat (thyroid); negative in mouse.	UF: 0 OPPADI: 0 RFD: 0 WHOADI: 0 QSTAR: 0	Chronic feeding- dog No RfD derivation until dog study is submitted & reviewed. Referred to Cancer Peer Review.	RfD/PR reviewed

OFFICE OF PESTICIDES PROGRAMS REFERENCE DOSE TRACKING REPORT

CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Profenofos (Curacron) CAS: 41198-08-7 EPA Chem Code: 111401 CASWELL: 266AA CFR: 180.404 CFR185: REG_GROUP:	6mo feeding- dog NOEL: 0.005 mg/kg/day 0.2 ppm LEL: 0.05 mg/kg/day 2 ppm LIST B Cancer: E (RfD/PR	Plasma and RBC ChE inhibition. Measurements of brain ChE not adequate. No evidence of enicity in rats or mice.	ADI UF: 100 OPPADI: 0.00005 RFD: 0 WHOADI: 0.01 QSTAR: 0	No data gaps.	HED reviewed 03/03/87 WHO reviewed 1990 RfD/PR reviewed
Profluralin CAS: 26399-36-0 EPA Chem Code: 106601 CASWELL: 271BB CFR: 180.348 CFR185: REG_GROUP:	NOEL: 0 mg/kg/day 0 ppm LEL: 0 mg/kg/day 0 ppm Cancer:		UF: 0 OPPADI: 0 RFD: 0 WHOADI: 0 QSTAR: 0	All food use cancelled 1988. All tolerances revoked 1993.	
Prometon CAS: 1610-18-0 EPA Chem Code: 080804 CASWELL: 096 CFR: CFR185: REG_GROUP:	2yr feeding- rat NOEL: 0.89 mg/kg/day 20 ppm LEL: 23.3 mg/kg/day 500 ppm LIST B Cancer: D (HED)	Decreased body weight gain & food	PADI UF: 100 OPPADI: 0.009 RFD: 0.015 WHOADI: 0 QSTAR: 0	Chronic feeding- dog (study maybe Core grade reserved for the two developmental studies - pending reassessment of studies	HED reviewed 03/31/86 EPA verified 05/30/86 RfD/PR reviewed On IRIS.
Prometryn CAS: 7287-19-6 EPA Chem Code: 080805 CASWELL: 097 CFR: 180.222 CFR185: REG_GROUP:	2yr feeding- dog NOEL: 3.75 mg/kg/day 150 ppm LEL: 37.5 mg/kg/day 1500 ppm LIST A (6C) Cancer: E (RfD/PR	Degenerative changes liver and kidney, bone marrow atrophy. No evidence of enicity in rats or mice.	ADI UF: 100 OPPADI: 0.04 RFD: 0.004 WHOADI: 0 QSTAR: 0	No data gaps.	HED reviewed 10/10/86 EPA pending 12/09/86 HED reassess 3/17/87 EPA verified 4/15/87 RfD/PR reviewed On IRIS.
Promexal (MTI) CAS: 82633-79-2 EPA Chem Code: 107107 CASWELL: CFR: CFR185: REG GROUP:	NOEL: 0 mg/kg/day 0 ppm LEL: 0 mg/kg/day 0 ppm Cancer:		UF: OPPADI: 0 RFD: 0 WHOADI: 0 QSTAR: 0	Since this chemical is not intended for food uses & since chronic or life time exposure is an unlikely scenario, an was not established.	RfD/PR reviewed

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CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Pronamide CAS: 23950-58-5 EPA Chem Code: 101701 CASWELL: 306A CFR: 180.317 CFR185: REG_GROUP:	2yr feeding-rat NOEL: 8.46 mg/kg/day 200 ppm LEL: 0 mg/kg/day 1000 ppm LIST A (6B) Cancer: B2 (HED); C (SAP)	Non-neoplastic changes in ovaries, oid & liver. Evidence of carcinogenicity in mice - hepatocellular & rats (thyroid, testes)	ADI UF: 100 OPPADI: 0.08 RFD: 0.08 WHOADI: 0 QSTAR: 0.0154	No data gaps.	HED reviewed 04/14/86 EPA verified 05/30/86 RfD/PR reviewed EPA verified 12/14/93 On IRIS.
Propachlor CAS: 1918-16-7 EPA Chem Code: 019101 CASWELL: 194 CFR: 180.211 CFR185: REG_GROUP:	90d feeding-rat NOEL: 13.3 mg/kg/day 0 ppm LEL: 133.3 mg/kg/day 0 ppm LIST A (6B) Cancer: *Undetermined*	Decreased weight gain, food consumption, increased liver weights. No valid carcinogenicity studies are available.	PADI UF: 1000 OPPADI: 0.013 RFD: 0.013 WHOADI: 0 QSTAR: 0	Chronic feed/carcino- Chronic feeding-dog Reproduction	HED reviewed 04/14/86 EPA verified 07/22/86 On IRIS.
Propamocarb hydrochloride CAS: 25606-41-1 EPA Chem Code: 119302 CASWELL: 710A CFR: CFR185: REG_GROUP:	2yr feeding-dog NOEL: 0 mg/kg/day 0 ppm LEL: 33.31 mg/kg/day 1000 ppm Cancer: D (RfD/PR	Focal or multifocal chronic erosive gastritis &/ or acute erosions.	PADI UF: 300 OPPADI: 0.1 RFD: 0 WHOADI: 0.1 QSTAR: 0	Non-food use chemical. [Syn. Previcur N,	WHO reviewed 1986 RfD/PR reviewed
Propanil CAS: 709-98-8 EPA Chem Code: 028201 CASWELL: 325 CFR: 180.274 CFR185: REG_GROUP:	2yr feeding-rat NOEL: 5 mg/kg/day 100 ppm LEL: 20 mg/kg/day 400 ppm LIST A (6C) Cancer: Undetermined	Increased relative spleen weight in No carcinogenicity data is available.	PADI UF: 1000 OPPADI: 0.005 RFD: 0.005 WHOADI: 0 QSTAR: 0	Chronic feed/carcino- Chronic feeding-dog (Supplementary per 1987 Reg. Std.) 2yr mouse NOEL of 5 is co-critical study.	HED reviewed 08/04/86 EPA verified 09/02/86 HED reassess 07/24/87 EPA verified 08/12/87 On IRIS.
Propargite (Omite) CAS: 2312-35-8 EPA Chem Code: 097601 CASWELL: 130I CFR: 180.259 CFR185: 185.5000 REG GROUP:	2yr feeding-rat NOEL: 3.83 mg/kg/day 80 ppm LEL: 19.24 mg/kg/day 400 ppm LIST A (6B) Cancer: B2 (HED)	Incr in deaths (M); decr body wt & body wt decr in total protein & Ca. Evidence of genicity rats (jejnum tumor/M&F); neg. in mice.	ADI UF: 100 OPPADI: 0.04 RFD: 0.02 WHOADI: 0.15 QSTAR: 0.0171	No data gaps. Reg. Std. 9/86.	WHO reviewed 1982 HED reviewed 03/17/87 EPA deferred 04/15/87 EPA verified 03/23/88 RfD/PR reviewed On IRIS.

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CHEMICAL	STUDY TYPE		EFFECTS	REFERENCE DOSES		DATA GAPS/COMMENTS	STATUS
Propargyl bromide				UF:	0		
CAS: 106-96-7	NOEL:	0 mg/kg/day		OPPADI:	0		
EPA Chem Code: 068701		0 ppm		RFD:	0		
CASWELL: 705	LEL:	0 mg/kg/day		WHOADI:	0		
CFR: 180.199		0 ppm		QSTAR:	0		
CFR185:							
REG_GROUP:	Cancer.						
Propazine	2yr feeding-rat		Decreased body weight	PADI UF:	300	Chronic feeding-dog	HED reviewed 07/18/86
CAS: 139-40-2	NOEL:	5 mg/kg/day	gain.	OPPADI:	0.02	Developmental tox-rat	EPA verified 09/29/86
EPA Chem Code: 080808		100 ppm	Evidence of	RFD:	0.02	(Core-Supplementary)	HED reassess 03/20/87
CASWELL: 184	LEL:	50 mg/kg/day	ity in F rats (mammary	WHOADI:	0	Developmental tox-	EPA confirmed
CFR: 180.243		1000 ppm	tumors); negative in	QSTAR:	0.0445	UF of 3 for data gaps.	
CFR185:			Registration cancelled.				On IRIS.
REG_GROUP:	LIST A - Cancer.		C (HED)				
Propetamphos	92wk feeding-		Decreased plasma, RBC	PADI UF:	10	Reproduction-rat	HED reviewed 08/08/86
CAS: 31218-83-4	NOEL:	0.05 mg/kg/day	brain ChE activity. Diets	OPPADI:	0.005	(Core-Supplementary)	EPA deferred 10/28/86
EPA Chem Code: 113601		0 ppm	adjusted to target	RFD:	0	NOEL of 0.05 mg/kg in	Pending RAC approval
CASWELL: 706A	LEL:	1 mg/kg/day		WHOADI:	0	6-month dog study	RAF ChE report.
CFR:		0 ppm	No evidence of	QSTAR:	0	supports RfD.	
CFR185: 185.5100			enicity in rats or mice.				
REG_GROUP:	LIST B Cancer.		Negative- 2				
Propham	90d feeding-rat		Increased spleen	PLD UF:	3000	Chronic feed/carcino-	HED reviewed 07/25/86
CAS: 122-42-9	NOEL:	50 mg/kg/day	decreased ChE activity	OPPADI:	0.02	Chronic feeding-dog	HED reassess 03/06/87
EPA Chem Code: 047601		1000 ppm	(plasma & RBC).	RFD:	0.02	Reproduction-rat	EPA verified 03/18/87
CASWELL: 510	LEL:	100 mg/kg/day		WHOADI:	0	Developmental tox- 2 sp	WHO reviewed 1992;
CFR: 180.319		2000 ppm	No evidence of	QSTAR:	0	UF of 3 used for data	not established.
CFR185:			enicity in rats or mice.			gaps.	On IRIS.
REG_GROUP:	LIST A Cancer.		Negative- NCI				
Propiconazole (Banner/Tilt)	1yr feeding-dog		Irritation of the stomach	ADI UF:	100	Questions concerning	HED reviewed 05/05/87
CAS: 60207-90-1	NOEL:	1.25 mg/kg/day	in males.	OPPADI:	0.013	ing in the mouse study.	EPA verified 07/15/87
EPA Chem Code: 122101		50 ppm		RFD:	0.013		WHO reviewed 1987
CASWELL: 323EE	LEL:	6.25 mg/kg/day	Evidence of	WHOADI:	0.04		EPA verified 05/25/88
CFR: 180.434		250 ppm	ity in mice (male liver);	QSTAR:	0	Triazole-alanine is plant	
CFR185:			negative in rats.			metabolite	On IRIS.
REG GROUP:	LIST C Cancer.		C (HED); D (SAP)				

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CHEMICAL	STUDY TYPE		EFFECTS	REFERENCE DOSES		DATA GAPS/COMMENTS	STATUS
Propineb				UF:			WHO reviewed 1993
CAS: 12701-83-9	NOEL:	0 mg/kg/day		OPPADI:	0		
EPA Chem Code: 522200		0 ppm		RFD:	0		
CASWELL: 922A	LEL:	0 mg/kg/day		WHOADI:	0.007		
CFR:		0 ppm		QSTAR:	0		
CFR185:							
REG_GROUP:	Cancer.						
Propionic Acid				UF:	0	Propionic acid is exempt	EPA deferred 07/16/91
CAS: 79-09-4	NOEL:	0 mg/kg/day		OPPADI:	0	from tolerances.	
EPA Chem Code: 077702		0 ppm		RFD:	0		
CASWELL: 707	LEL:	0 mg/kg/day		WHOADI:	0	Classified as a GRAS	
CFR: 180.1023		0 ppm		QSTAR:	0	FDA.	
CFR185:							
REG_GROUP:	LIST D	Cancer.					
Propylene oxide				UF:		Insufficient data for RfD	CRAVE verified
CAS: 75-56-9	NOEL:	0 mg/kg/day		OPPADI:	0	derivation.	Ad hoc meeting
EPA Chem Code: 042501		0 ppm		RFD:	0		
CASWELL: 713A	LEL:	0 mg/kg/day		WHOADI:	0		
CFR: 185.5150		0 ppm		QSTAR:	0.24		
CFR185: 185.5150						[Syn. Methyloxirane]	On IRIS.
REG_GROUP:	LIST B	Cancer.	B2 (CRAVE)				
Prosulfuron (CGA-152005)	1yr feeding- dog		Hematologic & clinical	PADI	UF: 100	Developmental Tox-	RfD/PR reviewed
CAS: 94125-34-5	NOEL:	1.84 mg/kg/day	chemistry (F); Incidence	OPPADI:	0.02		RfD/PR reviewed
EPA Chem Code: 129031		60 ppm	of lipofuscin accumulat-	RFD:	0		
CASWELL: 950A	LEL:	20.2 mg/kg/day	ion in liver (M&F).	WHOADI:	0		
CFR:		600 ppm		QSTAR:	0		
CFR185:							
REG_GROUP:	Newchemical	Cancer.	D (RfD/PR				
Pyrazon				UF:	0		
CAS: 1698-60-8	NOEL:	0 mg/kg/day		OPPADI:	0		
EPA Chem Code: 069601		0 ppm		RFD:	0		
CASWELL: 714C	LEL:	0 mg/kg/day		WHOADI:	0		
CFR: 180.316		0 ppm		QSTAR:	0		
CFR185:							
REG GROUP:	LIST B	Cancer.					

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CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Pyrazophos			UF: 0		WHO reviewed 1992
CAS: 13457-18-6	NOEL: 0 mg/kg/day		OPPADI: 0		
EPA Chem Code: 447500	0 ppm		RFD: 0		
CASWELL: 714D	LEL: 0 mg/kg/day		WHOADI: 0.004		
CFR:	0 ppm		QSTAR: 0		
CFR185:					
REG_GROUP:	Cancer.				
Pyrethrins	2gen reprod- rat	Reduction in F1b pup wt	PADI UF: 100	Chronic feed/carcino-	WHO reviewed 1972
CAS: 121-21-1	NOEL: 6.4 mg/kg/day	during lactation.	OPPADI: 0.064	Carcinogenicity- mouse	RfD/PR reviewed
EPA Chem Code: 069001	100 ppm		RFD: 0	(Both studies are core	
CASWELL: 715	LEL: 65 mg/kg/day		WHOADI: 0.04	supplementary & may	
CFR: 180.128	1000 ppm		QSTAR: 0.00657	upgraded).	
CFR185: 185.5200					
REG_GROUP:	LIST B Cancer. Deferred (HCPRC)				
Pyridaben	1yr feeding- dog	Decreased body weight	ADI UF: 100	No data gaps.	RfD/PR reviewed
CAS: 96489-71-3	NOEL: 0.5 mg/kg/day	gain in females.	OPPADI: 0.005		RfD/PR reviewed
EPA Chem Code: 129105	0 ppm		RFD: 0	NOEL/LEL were derived	
CASWELL:	LEL: 1 mg/kg/day		WHOADI: 0	from the 21-year dog	
CFR:	0 ppm	No evidence of	QSTAR: 0	studies.	
CFR185:		enicity in rats or mice.			
REG_GROUP:	Newchemical Cancer. E (RfD/PR				
Pyridate	2yr Feeding- rat	Body weight depression	ADI UF: 100	Carcinogenicity -	HED complete 05/15/87
CAS: 35512-33-9	NOEL: 10.8 mg/kg/day	male.	OPPADI: 0.11	3-gen rero study is co-	HED deferred 03/29/90
EPA Chem Code: 128834	216 ppm		RFD: 0	critical; NOEL=10.8	HED reviewed 05/11/90
CASWELL: 716A	LEL: 67.5 mg/kg/day	No evidence of	WHOADI: 0	LEL=67.5 mg/kg	
CFR: 180.462	1350 ppm	enicity in rats; mouse	QSTAR: 0	matenal & pup body	
CFR185:		study to be repreated.		gains.	
REG_GROUP:	Cancer. Negative- 1				
Pyridine	90d feeding- rat	Increased liver weight.	UF: 1000	Critical study and data	EPA verified 08/13/87
CAS: 110-86-1	NOEL: 1 mg/kg/day		OPPADI: 0	base not reveiwed by	
EPA Chem Code: 069202	0 ppm		RFD: 0.001	RfD/PR Committee.	
CASWELL: 717	LEL: 10 mg/kg/day		WHOADI: 0		
CFR:	0 ppm		QSTAR: 0		
CFR185:					On IRIS.
REG GROUP:	Cancer.				

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CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Pyrifenox (RO 15-1297/000) CAS: 88283-41-4 EPA Chem Code: 128869 CASWELL: 323J CFR: CFR185: REG_GROUP:	1yr feeding- dog NOEL: 10 mg/kg/day 0 ppm LEL: 50 mg/kg/day 0 ppm Cancer: Undetermined.	Decr BW; gross and scopic changes in liver and GI; altered serum chem. Doses by No carcinogenicity data is available.	PADI UF: 1000 OPPADI: 0.01 RFD: 0 WHOADI: 0 QSTAR: 0	Chronic feed/carcino- Reproduction- rat Developmental tox- rat Carcinogenicity- mouse	HED reviewed 08/28/87
Pyrimethanil CAS: 53112-28-0 EPA Chem Code: 288201 CASWELL: CFR: CFR185: REG_GROUP:	2yr feeding- rat NOEL: 17 mg/kg/day 400 ppm LEL: 221 mg/kg/day 5000 ppm Newchemical Cancer: Referred to HCPRC	Depressed body wt incr serum cholesterol & GGT levels, incr relative liver/body wt ratios. Referred to HED enicity Peer Review	ADI UF: 100 OPPADI: 0.2 RFD: 0 WHOADI: 0 QSTAR: 0	Carcinogenicity- mouse (Core supplementary)	RfD/PR reviewed
Pyrithiobac-sodium CAS: 123343-16-8 EPA Chem Code: 078905 CASWELL: CFR: CFR185: REG_GROUP:	2yr feeding- rat NOEL: 58.7 mg/kg/day 1500 ppm LEL: 200 mg/kg/day 5000 ppm Newchemical Cancer: C (HCPRC)	Decr body wt gain & consumption; eye kidney & liver effects. Evidence of ity in M mice (liver) & M rats (kidney).	ADI UF: 100 OPPADI: 0.6 RFD: 0 WHOADI: 0 QSTAR: 0.0125	No data gaps.	RfD/PR reviewed
Quinalphos CAS: 13593-03-8 EPA Chem Code: 381400 CASWELL: 662A CFR: CFR185: REG_GROUP:	2yr feeding- dog NOEL: 0.05 mg/kg/day 2 ppm LEL: 0 mg/kg/day 0 ppm Cancer: Negative- 2	Inhibition of plasma ChE at 2 ppm, NOEL = 0.5 No systemic toxicity at HDT. No evidence of enicity in rats or mice.	PADI UF: 100 OPPADI: 0.0005 RFD: 0.0005 WHOADI: 0 QSTAR: 0	Developmental tox- rat Inhibition of plasma ChE was noted at HDT (2 however no systemic most conservative RfD using HDT with 100 UF.	HED reviewed 07/18/86 EPA verified 12/16/86 On IRIS.
Quinclorac (Facet) CAS: 84087-01-4 EPA Chem Code: 128974 CASWELL: 325A CFR: 180.463 CFR185: REG GROUP:	*2yr feeding- mouse* NOEL: 37.5 mg/kg/day 250 ppm LEL: 150 mg/kg/day 1000 ppm Newchemical Cancer: D (HED)	*Body weight effects.*	ADI UF: 100 OPPADI: 0.38 RFD: 0.38 WHOADI: 0 QSTAR: 0	*No data gaps.*	Ad hoc meeting RfD/PR reviewed EPA verified 03/24/92

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CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Quizalofop ethyl (Assure) CAS: 76578-14-8 EPA Chem Code: 128711 CASWELL: 215D CFR: 180.441 CFR185: 185.5250 REG_GROUP:	2yr feeding- rat NOEL: 0.9 mg/kg/day 25 ppm LEL: 3.7 mg/kg/day 100 ppm Cancer: D (HED)	Generalized hepatocyte enlargement in M & F. cell destruction in M & F No evidence of enicity in rats; Mouse liver tumors equivocal.	PADI UF: 100 OPPADI: 0.009 RFD: 0.009 WHOADI: 0 QSTAR: 0	No data gaps. ADI based on actual consumption.	HED reviewed 12/11/87 EPA verified 01/21/88; Additional HED review required. On IRIS.
Resmethrin CAS: 10453-86-8 EPA Chem Code: 097801 CASWELL: 083E CFR: CFR185: 185.5300 REG_GROUP:	2gen reprod- rat NOEL: 34.8 mg/kg/day 500 ppm LEL: 70.8 mg/kg/day 1000 ppm LIST A (6C) Cancer: Referred to HCPRC	Systemic tox: decr body wt gain; treatment-related mortality. Repro tox: decr mating & viability index; decr pup wt; incr in stillborn pups.	ADI UF: 100 OPPADI: 0.35 RFD: 0.03 WHOADI: 0 QSTAR: 0	No data gaps. No food uses. Referred to HED enicity Peer Review	HED reviewed 07/01/88 EPA verified 07/20/88 RfD/PR reviewed On IRIS.
Rimsulfuron (DPX-E9636) CAS: 122931-48-0 EPA Chem Code: 129009 CASWELL: 358B CFR: CFR185: REG_GROUP:	1yr feeding - dog NOEL: 1.6 mg/kg/day 50 ppm LEL: 81.8 mg/kg/day 2500 ppm Newchemical Cancer: E (RfD/PR	Incr absolute liver & kidney wts; incr incidence of seminiferous tubule degeneration No evidence of enicity in rats or mice.	ADI UF: 100 OPPADI: 0.016 RFD: 0 WHOADI: 0 QSTAR: 0	No data gaps.	RfD/PR reviewed
Ronnel (Fenchlorphos) CAS: 299-84-3 EPA Chem Code: 058301 CASWELL: 724 CFR: 180.177 CFR185: REG_GROUP:	2yr feeding- rat NOEL: 1.5 mg/kg/day 0 ppm LEL: 5 mg/kg/day 0 ppm LIST B Cancer: Negative- 1	Inhibition of plasma, brain ChE. No evidence of enicity in rats.	PADI UF: 100 OPPADI: 0.015 RFD: 0 WHOADI: 0.01 QSTAR: 0	Developmental tox- rat UF of 100 used due to inhibition of brain ChE.	WHO reviewed 1968 HED reviewed 01/13/87 EPA deferred 02/18/87 Pending RAC approval RAF ChE report.
Rotenone CAS: 83-79-4 EPA Chem Code: 071003 CASWELL: 725 CFR: 180.1001 CFR185: REG GROUP:	2gen reprod- rat NOEL: 0.38 mg/kg/day 7.5 ppm LEL: 1.88 mg/kg/day 37.5 ppm LIST A (6C) Cancer: E (HED/SAP)	Reduced pup weight.	PADI UF: 100 OPPADI: 0.004 RFD: 0.004 WHOADI: 0 QSTAR: 0	Chronic feed/carcino- Carcinogenicity- mouse Exempt from tolerances.	HED reviewed 12/11/87 EPA verified 01/21/88 On IRIS.

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CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
SD84811 (CHA-811) CAS: 36476-78-5 EPA Chem Code: 128830 CASWELL: 063C CFR: CFR185: REG_GROUP:	90d feeding- rat NOEL: 0.5 mg/kg/day 10 ppm LEL: 1.5 mg/kg/day 30 ppm Cancer. Undetermined.	Increased platelet court, decreased blood protein and albumin. No carcinogenicity data is available.	PADI UF: 1000 OPPADI: 0.0005 RFD: 0 WHOADI: 0 QSTAR: 0	Chronic feed/carcino- Chronic feeding- dog Reproduction- rat	HED reviewed 04/07/88
Schradan CAS: 152-16-9 EPA Chem Code: 058601 CASWELL: 610 CFR: 180.166 CFR185: REG_GROUP:	NOEL: 0 mg/kg/day 0 ppm LEL: 0 mg/kg/day 0 ppm Cancer.		UF: 0 OPPADI: 0 RFD: 0 WHOADI: 0 QSTAR: 0	[Syn. phoramide]	
Secbumeton CAS: 26259-45-0 EPA Chem Code: 331300 CASWELL: 125C CFR: 180.323 CFR185: REG_GROUP:	NOEL: 0 mg/kg/day 0 ppm LEL: 0 mg/kg/day 0 ppm Cancer.		UF: 0 OPPADI: 0 RFD: 0 WHOADI: 0 QSTAR: 0		
Sesone CAS: 136-78-7 EPA Chem Code: 030602 CASWELL: 319 CFR: 180.102 CFR185: REG_GROUP:	NOEL: 0 mg/kg/day 0 ppm LEL: 0 mg/kg/day 0 ppm Cancer.		UF: 0 OPPADI: 0 RFD: 0 WHOADI: 0 QSTAR: 0		
Sethoxydim (Poast) CAS: 74051-80-2 EPA Chem Code: 121001 CASWELL: 072A CFR: 180.412 CFR185: 185.2800 REG GROUP:	1yr feeding- dog NOEL: 8.86 mg/kg/day 300 ppm LEL: 17.5 mg/kg/day 600 ppm LIST B Cancer. Negative- 2	Mild anemia in males (Actual dose tested) No evidence of enicity in rats or mice.	ADI UF: 100 OPPADI: 0.09 RFD: 0.09 WHOADI: 0 QSTAR: 0	Carcinogenicity- rat (Current rat study has unresolved MTD issue)	EPA verified 09/02/86 HED reassess 10/24/86 EPA verified 10/28/86 HED reassess 05/10/89 EPA verified 06/15/89 On IRIS.

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CHEMICAL	STUDY TYPE		EFFECTS	REFERENCE DOSES		DATA GAPS/COMMENTS	STATUS
Silicon dioxide				UF:			
CAS: 7631-86-9	NOEL:	0 mg/kg/day		OPPADI:	0		
EPA Chem Code: 072605		0 ppm		RFD:	0		
CASWELL:	LEL:	0 mg/kg/day		WHOADI:	0		
CFR:		0 ppm		QSTAR:	0		
CFR185: 185.1700							
REG_GROUP:	Cancer:						
Silvex (acid + salts)	2yr feeding- dog		Histopathological	PADI UF:	100	Reproduction- rat	EPA verified 01/06/87
CAS: 93-72-1	NOEL:	0.8 mg/kg/day	in the liver (doses est.	OPPADI:	0.008	Developmental tox-	HED reviewed 10/30/87
EPA Chem Code: 082501		30 ppm	from food consumption).	RFD:	0.008		EPA verified 01/21/88
CASWELL: 739	LEL:	2.5 mg/kg/day	No evidence of	WHOADI:	0		
CFR: 180.340		100 ppm	enicity in rats, no data	QSTAR:	0		
CFR185:			for mice.				On IRIS.
REG_GROUP:	Cancer: D (CRAVE)						
Simazine	2yr feeding- rat		Reduction in weight	PADI UF:	100	Developmental tox- rat	HED reviewed 04/25/86
CAS: 122-34-9	NOEL:	0.52 mg/kg/day	hematological changes	OPPADI:	0.005		EPA verified 06/24/86
EPA Chem Code: 080807		10 ppm	females.	RFD:	0.005		HED reassess 05/25/89
CASWELL: 740	LEL:	5.3 mg/kg/day	Evidence of	WHOADI:	0		EPA verified 06/15/89
CFR: 180.213		100 ppm	ity in female rats (mam-	QSTAR:	0.12		EPA verified 08/14/91
CFR185: 185.5350			mary); negative in mice.				On IRIS.
REG_GROUP:	LIST A (5	Cancer: C(q) (HED); C					
Sodium 4,6-dinitro-o-cresol				UF:	0		WHO reviewed 1965;
CAS: 2312-76-7	NOEL:	0 mg/kg/day		OPPADI:	0		not established.
EPA Chem Code: 037508		0 ppm		RFD:	0		
CASWELL: 390A	LEL:	0 mg/kg/day		WHOADI:	0		
CFR: 180.344		0 ppm		QSTAR:	0		
CFR185:							
REG_GROUP:	LIST B	Cancer:					
Sodium arsenate				UF:	0		
CAS: 13464-38-5	NOEL:	0 mg/kg/day		OPPADI:	0		
EPA Chem Code: 013505		0 ppm		RFD:	0		
CASWELL: 743	LEL:	0 mg/kg/day		WHOADI:	0		
CFR: 180.196		0 ppm		QSTAR:	0		
CFR185:							
REG GROUP:	LIST A	Cancer:					

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CHEMICAL	STUDY TYPE		EFFECTS	REFERENCE DOSES		DATA GAPS/COMMENTS	STATUS
Sodium arsenite				UF:	0		
CAS: 7784-46-5	NOEL:	0 mg/kg/day		OPPADI:	0		
EPA Chem Code: 013603		0 ppm		RFD:	0		
CASWELL: 744	LEL:	0 mg/kg/day		WHOADI:	0		
CFR: 180.335		0 ppm		QSTAR:	0		
CFR185:							
REG_GROUP:	LIST B	Cancer.					
Sodium dehydroacetate				UF:	0		
CAS: 4418-26-2	NOEL:	0 mg/kg/day		OPPADI:	0		
EPA Chem Code: 027802		0 ppm		RFD:	0		
CASWELL: 278A	LEL:	0 mg/kg/day		WHOADI:	0		
CFR: 180.159		0 ppm		QSTAR:	0		
CFR185:							
REG_GROUP:	Cancer.						
Sodium fluoroacetate	90d feeding- rat		Increased heart weight	PLD UF:	3000	Out-dated pesticide.	EPA deferred 02/21/90
CAS: 62-74-8	NOEL:	0.05 mg/kg/day	females & males;	OPPADI:	0.00002		EPA deferred 03/21/90
EPA Chem Code: 075003		0 ppm	ed testis weight & alter-	RFD:	0.00002		EPA verified 02/20/91
CASWELL: 770	LEL:	0.2 mg/kg/day	ed spermatogenesis in	WHOADI:	0		HED concurrs 02/20/91
CFR:		0 ppm	males.	QSTAR:	0		RfD/PR reviewed
CFR185:							
REG_GROUP:	LIST C	Cancer.					
Sodium metaborate				UF:	0		
CAS: 7775-19-1	NOEL:	0 mg/kg/day		OPPADI:	0		
EPA Chem Code: 011104		0 ppm		RFD:	0		
CASWELL: 779AA	LEL:	0 mg/kg/day		WHOADI:	0		
CFR: 180.271		0 ppm		QSTAR:	0		
CFR185:							
REG_GROUP:	LIST A	Cancer.					
Sodium omadine	2yr oral- rat		Significant incr in the	PADI UF:	100	To be determined.	RfD/PR reviewed
CAS: 15922-78-8	NOEL:	0.5 mg/kg/day	incidence of	OPPADI:	0.005		RfD/PR reviewed
EPA Chem Code: 088004		0 ppm	of the skeletal muscle of	RFD:	0		
CASWELL: 790A	LEL:	1.5 mg/kg/day	the hindlimbs in both	WHOADI:	0		
CFR:		0 ppm	sexes.	QSTAR:	0		
CFR185:							
REG GROUP:	LIST A (6B)	Cancer. D (RfD/PR					

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CHEMICAL	STUDY TYPE		EFFECTS	REFERENCE DOSES		DATA GAPS/COMMENTS	STATUS
Sodium trichloroacetate				UF:	0		
CAS: 650-51-1	NOEL:	0 mg/kg/day		OPPADI:	0		
EPA Chem Code: 081001		0 ppm		RFD:	0		
CASWELL: 797	LEL:	0 mg/kg/day		WHOADI:	0		
CFR: 180.310		0 ppm		QSTAR:	0		
CFR185:							
REG_GROUP:	LIST D	Cancer.					
Spinosad (XDE-105)	1yr feeding- dog		Incr in SGPT, SGOT &	PADI UF:	100	Chronic feed/carcino-	RfD/PR reviewed
CAS: 13129-60-7	NOEL:	2.68 mg/kg/day	glycerides levels;	OPPADI:	0.03	(current study is	
EPA Chem Code: 110003		100 ppm	lated cell aggregations,	RFD:		able)	
CASWELL:	LEL:	8.22 mg/kg/day	arteritis & granular cell	WHOADI:		Carcinogenicity- mouse	
CFR:		300 ppm	vacuolation	QSTAR:			
CFR185:							
REG_GROUP:	Newchemical	Cancer. Undetermined					
Streptomycin	2yr feeding - rat		Reduced body weight	PADI UF:	100	Human drug.	RfD/PR reviewed
CAS: 57-92-1	NOEL:	5 mg/kg/day	(From 1988 Registration	OPPADI:	0.05		
EPA Chem Code: 006306		0 ppm	Standard)	RFD:	0	Negligible residue.	
CASWELL: 804	LEL:	10 mg/kg/day		WHOADI:	0		
CFR: 180.245		0 ppm		QSTAR:	0		
CFR185:							
REG_GROUP:	LIST A (6C)	Cancer.					
Streptomycin sulfate				UF:	0		
CAS: 3810-74-0	NOEL:	0 mg/kg/day		OPPADI:	0		
EPA Chem Code: 006310		0 ppm		RFD:	0		
CASWELL: 804A	LEL:	0 mg/kg/day		WHOADI:	0		
CFR: 180.245		0 ppm		QSTAR:	0		
CFR185:							
REG_GROUP:	LIST A	Cancer.					
Sulfallate				UF:	0		
CAS: 95-06-7	NOEL:	0 mg/kg/day		OPPADI:	0		
EPA Chem Code: 039001		0 ppm		RFD:	0		
CASWELL: 180	LEL:	0 mg/kg/day		WHOADI:	0		
CFR: 180.247		0 ppm		QSTAR:	0		
CFR185:							
REG GROUP:	LIST D	Cancer.	2B (IARC)				

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CHEMICAL	STUDY TYPE		EFFECTS	REFERENCE DOSES		DATA GAPS/COMMENTS	STATUS
Sulfentrazone	2gen reprod- rat		Reduced premating	ADI UF:	1000	Dominant lethal - rat	RfD/PR reviewed
CAS: 122836-35-5	NOEL:	14 mg/kg/day	gain in F1 M; histopatho-	OPPADI:	0.014	Additional UF of 10 was	RfD/PR reviewed
EPA Chem Code: 129081		200 ppm	logical findings in test-	RFD:	0	used due to high	
CASWELL:	LEL:	33 mg/kg/day	es & epididymides of F1	WHOADI:	0	for developmental &	
CFR:		500 ppm	decr F1 M fertility.	QSTAR:	0	roductive effects.	
CFR185:							
REG_GROUP:	Newchemical	Cancer: E (RfD/PR					
Sulfluramid				UF:			
CAS: 4151-50-2	NOEL:	0 mg/kg/day		OPPADI:	0		
EPA Chem Code: 128992		0 ppm		RFD:	0		
CASWELL:	LEL:	0 mg/kg/day		WHOADI:	0		
CFR:		0 ppm		QSTAR:	0		
CFR185:							
REG_GROUP:	Cancer:						
Sulfotepp (Thiotepp)	90d feeding- rat		Decreased RBC and	PLD UF:	1000	Chronic feeding- 2	EPA verified 02/24/88
CAS: 3689-24-5	NOEL:	0.5 mg/kg/day	ChE activity. (The criti-	OPPADI:	0.0005	Reproduction- rat	HED concurs 02/24/88
EPA Chem Code: 079501		10 ppm	cal study is from the	RFD:	0.0005	Developmental tox- 2	
CASWELL: 837	LEL:	1 mg/kg/day	open literature)	WHOADI:	0	[Syn. Tetraethyldithio-	
CFR:		20 ppm	No carcinogenicity data	QSTAR:	0	pyrophosphate].	
CFR185:			is available.			No food uses.	On IRIS.
REG_GROUP:	LIST A (6C)	Cancer: Undetermined.					
Sulfur				UF:	0	No RfD needed; Exempt	
CAS: 7704-34-9	NOEL:	0 mg/kg/day		OPPADI:	0	from tolerances.	
EPA Chem Code: 077501		0 ppm		RFD:	0		
CASWELL: 812	LEL:	0 mg/kg/day		WHOADI:	0		
CFR:		0 ppm		QSTAR:	0		
CFR185:							
REG_GROUP:	LIST A -	Cancer:					
Sulfur dioxide				UF:			
CAS: 7446-09-5	NOEL:	0 mg/kg/day		OPPADI:	0		
EPA Chem Code: 077601		0 ppm		RFD:	0		
CASWELL: 813	LEL:	0 mg/kg/day		WHOADI:	0		
CFR: 180.444		0 ppm		QSTAR:	0		
CFR185:							
REG GROUP:	LIST D	Cancer:					

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CHEMICAL	STUDY TYPE		EFFECTS	REFERENCE DOSES		DATA GAPS/COMMENTS	STATUS
Sulfuryl fluoride				UF:	0	No food use.	RfD/PR reviewed
CAS: 2699-79-8	NOEL:	0 mg/kg/day		OPPADI:	0		
EPA Chem Code: 078003		0 ppm		RFD:	0		
CASWELL: 816A	LEL:	0 mg/kg/day		WHOADI:	0		
CFR:		0 ppm		QSTAR:	0		
CFR185:							
REG_GROUP:	LIST A (6B)	Cancer.					
Sulphenone (Trifenson)				UF:	0		
CAS: 80-00-2	NOEL:	0 mg/kg/day		OPPADI:	0		
EPA Chem Code: 060501		0 ppm		RFD:	0		
CASWELL: 211D	LEL:	0 mg/kg/day		WHOADI:	0		
CFR: 180.112		0 ppm		QSTAR:	0		
CFR185:							
REG_GROUP:	Cancer.						
Sulprofos (Merpafos/Bolstar)	2yr feeding- dog		Plasma, RBC, brain ChE	ADI UF:	100	No data gaps.	HED reviewed 03/14/86
CAS: 35400-43-2	NOEL:	0.25 mg/kg/day	inhibition.	OPPADI:	0.003		EPA deferred 11/25/86
EPA Chem Code: 111501		10 ppm		RFD:	0		RfD/PR reviewed
CASWELL: 453AA	LEL:	2.5 mg/kg/day		WHOADI:	0		
CFR: 180.374		100 ppm	No evidence of	QSTAR:	0		
CFR185: 185.3000			enicity in rats or mice.				
REG_GROUP:	LIST A (6A)	Cancer. E (RfD/PR					
Sumilarv (Pyriproxyfen)	2yr feeding- rat		Negative trend in mean	ADI UF:	100	No data gaps.	RfD/PR reviewed
CAS: 95737-68-1	NOEL:	35.1 mg/kg/day	RBC volume; incr	OPPADI:	0.35		
EPA Chem Code: 129032		600 ppm	cyte cytoplasm & cyto-	RFD:	0		
CASWELL:	LEL:	141.28 mg/kg/day	plasm:nucleus ratios, &	WHOADI:	0		
CFR:		2000 ppm	decr sinusoidal spaces.	QSTAR:	0		
CFR185:							
REG_GROUP:	Newchemical	Cancer. E (RfD/PR					
Sumithrin (Phenothrin)	1yr feeding- dog		Hepatocellular enlarge-	UF:	100	Critical study and data	WHO reviewed 1988
CAS: 26002-80-2	NOEL:	7.1 mg/kg/day	ment in liver, focal	OPPADI:	0.071	base not reviewed by	
EPA Chem Code: 069005		300 ppm	degeneration in adrenal	RFD:	0	RfD/PR Committee.	
CASWELL: 652B	LEL:	26.8 mg/kg/day	cortex (Actual dose	WHOADI:	0.07		
CFR:		1000 ppm	ed).	QSTAR:	0	No food uses.	
CFR185:							
REG GROUP:	LIST A (6C)	Cancer.					

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CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
TCMTB (Busan 72)	1yr feeding- dog	Decr body wt gain,	ADI UF: 1000	No data gaps.	Ad hoc meeting
CAS: 21564-17-0	NOEL: 0 mg/kg/day	cells, monocytes &	OPPADI: 0.004		RfD/PR reviewed
EPA Chem Code: 035603	0 ppm	ALT in M; decr plasma	RFD: 0		
CASWELL: 853A	LEL: 3.8 mg/kg/day	& uterine wt in females	WHOADI: 0	Evidence of	
CFR: 180.288	100 ppm		QSTAR: 0	ity in M rats (testes) &	
CFR185:				F rats (thyroid).	
REG_GROUP:	LIST B Cancer: C (HCPRC)				
THPS		Since this chemical is	UF:		RfD/PR reviewed
CAS: 55566-30-8	NOEL: 0 mg/kg/day	not intended for food	OPPADI: 0		
EPA Chem Code: 129058	0 ppm	uses & since chronic or	RFD: 0		
CASWELL:	LEL: 0 mg/kg/day	life time exposure is an	WHOADI: 0	[Syn. Tetrakis(hydroxy-	
CFR:	0 ppm	unlikely scenario, an	QSTAR: 0	methyl) phosphonium	
CFR185:		was not established.		sulphate	
REG_GROUP:	Newchemical Cancer:				
Tartar emetic (antimony)			UF: 0		
CAS: 28300-74-5	NOEL: 0 mg/kg/day		OPPADI: 0		
EPA Chem Code: 006201	0 ppm		RFD: 0		
CASWELL: 053	LEL: 0 mg/kg/day		WHOADI: 0		
CFR: 180.179	0 ppm		QSTAR: 0		
CFR185:					
REG_GROUP:	LIST D Cancer:				
Tebuconazole (Folicur)	1yr feeding- dog	Hypertrophy of adrenal	ADI UF: 100	No data gaps.	RfD/PR reviewed
CAS: 107534-96-3	NOEL: 2.96 mg/kg/day	zona fasciculate cells;	OPPADI: 0.03		Developmental PR 06/92
EPA Chem Code: 128997	100 ppm	Fatty changes in the	RFD: 0		RfD/PR reviewed
CASWELL: 463P	LEL: 4.39 mg/kg/day	glomerulosa.	WHOADI: 0		RfD/PR reviewed
CFR:	150 ppm	Evidence of	QSTAR: 0		
CFR185:		ity in mice (liver).			
REG_GROUP:	Newchemical Cancer: C (HCPRC)				
Tebufenozide	1yr feeding- dog	Changes in hematology,	ADI UF: 100	No data gaps.	RfD/PR reviewed
CAS: 112410-23-8	NOEL: 1.8 mg/kg/day	clinical chemistry, abs.	OPPADI: 0.018	From dog study	
EPA Chem Code: 129026	50 ppm	& rel. spleen wts; histo	RFD: 0	for females are 1.9 &	
CASWELL: 945	LEL: 8.7 mg/kg/day	of bone, spleen & liver.	WHOADI: 0	mg/kg-day, respectively.	
CFR:	250 ppm	No evidence of	QSTAR: 0		
CFR185:		enicity in rats or mice.			
REG GROUP:	Newchemical Cancer: E (RfD/PR				

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CHEMICAL	STUDY TYPE			EFFECTS	REFERENCE DOSES			DATA GAPS/COMMENTS	STATUS
Tebuthiuron	2gen reprod- rat			Decreased weight gain	ADI	UF:	100	No data gaps.	EPA verified 04/15/87
CAS: 34014-18-1	NOEL:	7	mg/kg/day	F1 females.	OPPADI:		0.07		EPA verified 04/15/87
EPA Chem Code: 105501		100	ppm	(Actual dose tested).	RFD:		0.07		RfD/PR reviewed
CASWELL: 366AA	LEL:	14	mg/kg/day		WHOADI:		0		RfD/PR reviewed
CFR: 180.390		200	ppm	No evidence of	QSTAR:		0		
CFR185:				icity in rats or mice.					On IRIS.
REG_GROUP:	LIST A (6C)	Cancer: D (RfD/PR							
Tecnazene (TCNB)						UF:	0		WHO reviewed 1983
CAS: 117-18-0	NOEL:	0	mg/kg/day		OPPADI:		0		
EPA Chem Code: 055201		0	ppm		RFD:		0		
CASWELL: 831	LEL:	0	mg/kg/day		WHOADI:		0.01		
CFR: 180.203		0	ppm		QSTAR:		0		
CFR185:									
REG_GROUP:	LIST B	Cancer:							
Teflubenzuron	18mo feeding-			Liver effects (hypertro-	PADI	UF:	100	Reproduction - rat	RfD/PR reviewed
CAS: 83121-18-0	NOEL:	2.1	mg/kg/day	phy, single cell necrosis	OPPADI:		0.02	Developmental tox - rat	
EPA Chem Code: 129048		15	ppm	Kupffer cell proliferat-	RFD:		0	(core supplementary)	
CASWELL:	LEL:	10.5	mg/kg/day	ion, phagocytic cell foci	WHOADI:		0		
CFR:		75	ppm	& macrophages w/lipo-	QSTAR:		0		
CFR185:				fuscin accumulation.					
REG_GROUP:	NewChemical	Cancer: Referred to HCPRC							
Tefluthrin	1yr feeding- dog			Increased incidence of		UF:	100	Critical study and data	Ad hoc meeting
CAS: 79538-32-2	NOEL:	0.5	mg/kg/day	ataxia.	OPPADI:		0.005	base not reviewed by	
EPA Chem Code: 128912		0	ppm		RFD:		0	RfD/PR Committee.	
CASWELL: 838B	LEL:	2	mg/kg/day		WHOADI:		0		
CFR: 180.440		0	ppm		QSTAR:		0		
CFR185:									
REG_GROUP:	Cancer:								
Tektamer 38				Since this chemical is		UF:	0		RfD/PR reviewed
CAS: 35691-65-7	NOEL:	0	mg/kg/day	not intended for food	OPPADI:		0		
EPA Chem Code: 111001		0	ppm	uses & since chronic or	RFD:		0		
CASWELL: 114G	LEL:	0	mg/kg/day	life time exposure is an	WHOADI:		0		
CFR:		0	ppm	unlikely scenario, an	QSTAR:		0	[Syn. 1,2-Dibromo-2,4-	
CFR185:				was not established.				dicyanobutane]	
REG GROUP:	LIST B	Cancer:							

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CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Temephos	2yr feeding-rat	Increased liver weight.	UF: 1000	Critical study and data	Ad hoc meeting
CAS: 3383-96-8	NOEL: 0 mg/kg/day	NOEL not established.	OPPADI: 0.0005	base not reviewed by	
EPA Chem Code: 059001	0 ppm		RFD: 0	RfD/PR Committee.	
CASWELL: 845	LEL: 0.5 mg/kg/day		WHOADI: 0		
CFR: 180.170	10 ppm		QSTAR: 0		
CFR185:					
REG_GROUP:	LIST A (6A) Cancer:				
Terbacil	2yr feeding-dog	Increased relative liver	ADI UF: 100	No data gaps.	HED reviewed 05/02/86
CAS: 5902-51-2	NOEL: 1.25 mg/kg/day	weights, increased	OPPADI: 0.013		EPA verified 06/10/86
EPA Chem Code: 012701	50 ppm		RFD: 0.013		RfD/PR reviewedd
CASWELL: 821A	LEL: 6.25 mg/kg/day		WHOADI: 0		
CFR: 180.209	250 ppm	No evidence of	QSTAR: 0		
CFR185:		enicity in rats or mice.			On IRIS.
REG_GROUP:	LIST A (5 Cancer: E (RfD/PR				
Terbufos	28d feeding-dog	Inhibition of plasma ChE.	ADI UF: 100	No data gaps.	HED reassess 12/11/87
CAS: 13071-79-9	NOEL: 0.005 mg/kg/day		OPPADI: 0.00005	1-yr dog feeding study	EPA deferred 06/22/88
EPA Chem Code: 105001	0 ppm		RFD: 0	used as co-critical.	WHO reviewed 1989
CASWELL: 131A	LEL: 0.015 mg/kg/day		WHOADI: 0.0002	0.015 mg/kg (inhibition	RfD/PR reviewed
CFR: 180.352	0 ppm	No evidence of	QSTAR: 0	of plasma ChE); NOEL	RfD/PR reviewed
CFR185:		enicity in rats or mice.		established.	RfD/PR reviewed
REG_GROUP:	LIST A (4 Cancer: E (RfD/PR				
Terbuthylazine	2yr feeding-rat	Transient decreases in	PADI UF: 1000	Non-food use chemical.	HED reviewed 12/04/86
CAS: 5915-41-3	NOEL: 0.35 mg/kg/day	body weight and food	OPPADI: 0.0004		HED pending 10/30/87
EPA Chem Code: 080814	6 ppm	consumption.	RFD: 0		RfD/PR reviewed
CASWELL: 125B	LEL: 1.6 mg/kg/day	Chemical scheduled to	WHOADI: 0		
CFR: 180.333	30 ppm	reviewed by HED	QSTAR: 0		
CFR185:		enicity Peer Review			
REG_GROUP:	LIST B Cancer: D (HCPRC)				
Terbutryn	2yr feeding-rat	Dose related decrease	ADI UF: 100	No data gaps.	HED reviewed 01/13/87
CAS: 886-50-0	NOEL: 0.1 mg/kg/day	erythrocytes &	OPPADI: 0.001		EPA verified 08/12/87
EPA Chem Code: 080813	2 ppm	values in females.	RFD: 0.001		HED reassess 06/03/88
CASWELL: 125D	LEL: 15 mg/kg/day	Evidence of	WHOADI: 0		EPA verified 07/20/88
CFR: 180.265	300 ppm	ity rats (thyroid, liver	QSTAR: 0		
CFR185:		& mammary); neg in		Registration cancelled.	On IRIS.
REG GROUP:	LIST A - Cancer: C (HED); C (SAP)				

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CHEMICAL	STUDY TYPE		EFFECTS	REFERENCE DOSES		DATA GAPS/COMMENTS	STATUS
Terpene polychlorinates				UF:	0		
CAS: 8001-50-1	NOEL:	0 mg/kg/day		OPP ADI:	0		
EPA Chem Code: 020401		0 ppm		RFD:	0		
CASWELL: 822	LEL:	0 mg/kg/day		WHO ADI:	0		
CFR: 180.164		0 ppm		QSTAR:	0		
CFR185:							
REG_GROUP:	Cancer.						
Terrazole	2yr feeding- dog			UF:	100	Critical study and data	Ad hoc meeting
CAS: 2593-15-9	NOEL:	2.5 mg/kg/day		OPP ADI:	0.025	base not reviewed by	
EPA Chem Code: 084701		100 ppm		RFD:	0	RfD/PR Committee.	
CASWELL: 428	LEL:	0 mg/kg/day	Evidence of	WHO ADI:	0		
CFR: 180.370		0 ppm	ity in male & female rats	QSTAR:	0.072	Q* - 7.2 E-2 (M);	
CFR185:			(various sites).			5.4 E-3 (F)	
REG_GROUP:	LIST A (5	Cancer. B2					
Tetrachlorvinphos (Gardona)	2yr feeding- rat		Histological liver &	ADI UF:	100	No data gaps.	HED reviewed 08/04/86
CAS: 961-11-5	NOEL:	4.23 mg/kg/day	adrenal changes in	OPP ADI:	0.04		EPA verified 09/02/86
EPA Chem Code: 083701		100 ppm	decr body wt & plasma	RFD:	0.03		RfD/PR reviewed
CASWELL: 217A	LEL:	43.2 mg/kg/day	in F.	WHO ADI:	0		
CFR: 180.252		1000 ppm	Referred to HED	QSTAR:	0.00183		
CFR185:			enicity Peer Review				On IRIS.
REG_GROUP:	LIST A (6C)	Cancer. C(q) (HED)					
Tetradifon				UF:	0		
CAS: 116-29-0	NOEL:	0 mg/kg/day		OPP ADI:	0		
EPA Chem Code: 079202		0 ppm		RFD:	0		
CASWELL: 836	LEL:	0 mg/kg/day		WHO ADI:	0		
CFR: 180.174		0 ppm		QSTAR:	0		
CFR185: 185.5475							
REG_GROUP:	LIST B	Cancer.					
Tetraethyl pyrophosphate				UF:	0		
CAS: 107-49-3	NOEL:	0 mg/kg/day		OPP ADI:	0		
EPA Chem Code: 079601		0 ppm		RFD:	0		
CASWELL: 838	LEL:	0 mg/kg/day		WHO ADI:	0		
CFR: 180.347		0 ppm		QSTAR:	0		
CFR185:						[Syn. TEPP]	
REG GROUP:	Cancer.						

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CHEMICAL	STUDY TYPE		EFFECTS	REFERENCE DOSES		DATA GAPS/COMMENTS	STATUS
Tetraiodoethylene				UF:	0		
CAS: 513-92-8	NOEL:	0 mg/kg/day		OPPADI:	0		
EPA Chem Code: 046908		0 ppm		RFD:	0		
CASWELL: 842	LEL:	0 mg/kg/day		WHOADI:	0		
CFR: 180.162		0 ppm		QSTAR:	0		
CFR185:							
REG_GROUP:	Cancer.						
Tetramethrin				UF:			
CAS: 7696-12-0	NOEL:	0 mg/kg/day		OPPADI:	0		
EPA Chem Code: 069003		0 ppm		RFD:	0		
CASWELL: 844	LEL:	0 mg/kg/day		WHOADI:	0		
CFR:		0 ppm		QSTAR:	0		
CFR185:							
REG_GROUP:	LIST B Cancer.	C (HED)					
Tetrasul				UF:	0		
CAS: 2227-13-6	NOEL:	0 mg/kg/day		OPPADI:	0		
EPA Chem Code: 079201		0 ppm		RFD:	0		
CASWELL: 213	LEL:	0 mg/kg/day		WHOADI:	0		
CFR: 180.256		0 ppm		QSTAR:	0		
CFR185:							
REG_GROUP:	Cancer.						
Thiabendazole (+ salt)				ADI UF:	100	Critical study and data	WHO reviewed 1992
CAS: 148-79-8	NOEL:	0 mg/kg/day		OPPADI:	0.1	base not reviewed by	
EPA Chem Code: 060101		0 ppm		RFD:	0	RfD/PR Committee. RfD	
CASWELL: 849A	LEL:	0 mg/kg/day		WHOADI:	0.1	supplied by the	
CFR: 180.242		0 ppm		QSTAR:	0		
CFR185: 185.5550							
REG_GROUP:	LIST B	Cancer.					
Thiadiazuron				UF:	0		
CAS: 51707-55-2	NOEL:	0 mg/kg/day		OPPADI:	0		
EPA Chem Code: 120301		0 ppm		RFD:	0		
CASWELL: 659A	LEL:	0 mg/kg/day		WHOADI:	0		
CFR: 180.403		0 ppm		QSTAR:	0		
CFR185:							
REG GROUP:	LIST D	Cancer.					

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CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Thiameturon-methyl	2yr feeding-rat	Lower body wt gains in	ADI UF: 100	No data gaps.	HED reviewed 02/25/88
CAS: 79277-27-3	NOEL: 1.25 mg/kg/day	serum sodium in M & F	OPPADI: 0.013		EPA verified 03/23/88
EPA Chem Code: 128845	25 ppm	were sporadically lower	RFD: 0.013		
CASWELL: 573S	LEL: 25 mg/kg/day	thoughout the study.	WHOADI: 0		
CFR: 180.439	500 ppm	No evidence of	QSTAR: 0		
CFR185:		enicity in rats or mice.			On IRIS.
REG_GROUP:	Cancer: Negative-2				
Thiazopyr (MON 13200)	2yr feeding-dog	Hepatocellular hypertro-	ADI UF: 100	No data gaps.	RfD/PR reviewed
CAS: 117718-60-2	NOEL: 0.8 mg/kg/day	phy/hyperplasia.	OPPADI: 0.008		
EPA Chem Code: 129100	20 ppm		RFD: 0		
CASWELL: 849AA	LEL: 7.8 mg/kg/day		WHOADI: 0		
CFR:	200 ppm	Referred to HED	QSTAR: 0		
CFR185:		enicity Peer Review			
REG_GROUP:	Newchemical Cancer: C (HED)				
Thiobencarb (Bolero)	2yr feeding-rat	Decreased body	ADI UF: 100	No data gaps.	HED reviewed 02/11/86
CAS: 28249-77-6	NOEL: 1 mg/kg/day	food consumption &	OPPADI: 0.01		EPA pending 08/05/86
EPA Chem Code: 108401	20 ppm	efficiency; Increased	RFD: 0.01		HED reassess 03/20/87
CASWELL: 207DA	LEL: 5 mg/kg/day	blood urea nitrogen.	WHOADI: 0		EPA verified 04/15/87
CFR: 180.401	100 ppm	No evidence of	QSTAR: 0		RfD/PR reviewed
CFR185:		enicity in rats or mice.			On IRIS.
REG_GROUP:	LIST B Cancer: D (RfD/PR				
Thiodicarb (Larvin)	2yr feeding-rat	Increased incidence of	ADI UF: 100	No data gaps.	WHO reviewed 1986
CAS: 59669-26-0	NOEL: 3.3 mg/kg/day	extramedulary	OPPADI: 0.03		HED complete 11/19/86
EPA Chem Code: 114501	60 ppm	sis in males &	RFD: 0		HED reviewed 10/30/87
CASWELL: 900AA	LEL: 12 mg/kg/day	RBC ChE in females.	WHOADI: 0.03	Evidence of	RfD/PR reviewed
CFR: 180.407	200 ppm		QSTAR: 0	ity in mice (M&F liver) & M rats (testes).	
CFR185:					
REG_GROUP:	LIST B Cancer: B2 (HCPRC)				
Thiofanox (Dacamox)	90d feeding-dog	Transient plasma and	PADI UF: 100	Chronic feeding-dog	EPA deferred 02/24/88
CAS: 39196-18-4	NOEL: 0.025 mg/kg/day	erythrocyte ChE inhibit-	OPPADI: 0.0003	Developmental tox-rat	Pending RAC approval
EPA Chem Code: 109201	0 ppm	ion.	RFD: 0		RAF ChE report.
CASWELL: 368BB	LEL: 0.1 mg/kg/day	No evidence of	WHOADI: 0		
CFR:	0 ppm	enicity in rats; no data	QSTAR: 0		
CFR185:		on mice.			
REG GROUP:	Cancer: Negative-1				

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CHEMICAL	STUDY TYPE		EFFECTS	REFERENCE DOSES		DATA GAPS/COMMENTS	STATUS
Thiometon				UF:	0		WHO reviewed 1979
CAS: 640-15-3	NOEL:	0 mg/kg/day		OPPADI:	0		
EPA Chem Code: 456300		0 ppm		RFD:	0		
CASWELL: 455B	LEL:	0 mg/kg/day		WHOADI:	0.003		
CFR:		0 ppm		QSTAR:	0		
CFR185:							
REG_GROUP:	Cancer.						
Thiophanate-ethyl (Topsin)				UF:	0		
CAS: 23564-06-9	NOEL:	0 mg/kg/day		OPPADI:	0		
EPA Chem Code: 103401		0 ppm		RFD:	0		
CASWELL: 344A	LEL:	0 mg/kg/day		WHOADI:	0		
CFR:		0 ppm		QSTAR:	0		
CFR185:							
REG_GROUP:	LIST A -	Cancer.					
Thiophanate-methyl	2yr feeding- rat		Decreased body	PADI UF:	100	Developmental- rabbit	WHO reviewed 1977
CAS: 23564-05-8	NOEL:	8 mg/kg/day	decreased	OPPADI:	0.08		HED reviewed 02/21/86
EPA Chem Code: 102001		160 ppm	hyperthyroidism.	RFD:	0.08		EPA verified 03/11/86
CASWELL: 375A	LEL:	32 mg/kg/day		WHOADI:	0.08		
CFR: 180.371		640 ppm		QSTAR:	0		
CFR185:							On IRIS.
REG_GROUP:	LIST B Cancer.		Negative rat,				
Thiram	1yr feeding- dog		Significantly elevated	ADI UF:	100	No data gaps.	HED reviewed 11/19/86
CAS: 137-26-8	NOEL:	0.84 mg/kg/day	mean cholesterol levels	OPPADI:	0.008		EPA verified 05/15/87
EPA Chem Code: 079801		30 ppm	in males.	RFD:	0.005		WHO reviewed 1992
CASWELL: 856	LEL:	2.61 mg/kg/day		WHOADI:	0.01		RfD/PR reviewed
CFR: 180.132		90 ppm	Referred to HED	QSTAR:	0		
CFR185:			enicity Peer Review				On IRIS.
REG_GROUP:	LIST A (6A)	Cancer.	Referred to HCPRC				
Tolclofos-methyl (Rizolex)	6mo feeding- dog		Reduced body weight	PADI UF:	300	Chronic feeding- rat	RfD/PR reviewed
CAS: 57018-04-9	NOEL:	50 mg/kg/day	Hct, Hgb, RBC;	OPPADI:	0.05	Chronic feeding- dog	
EPA Chem Code: 128905		600 ppm	alkaline phosphatase,	RFD:	0	Reproduction- rat	
CASWELL: 509D	LEL:	0 mg/kg/day	absolute & relative liver	WHOADI:	0		
CFR:		2000 ppm	weights	QSTAR:	0		
CFR185:							
REG GROUP:	Newchemical	Cancer.					

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CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Toxaphene (Camphechlor)	2yr feeding- dog	Slight liver degeneration	PADI UF: 1000	Reproduction- rat	WHO reviewed 1973;
CAS: 8001-35-2	NOEL: 0.25 mg/kg/day	-granularity and vacuoli-	OPPADI: 0.00025	Developmental tox- rat	not established.
EPA Chem Code: 080501	10 ppm	zation of hepatocytes.	RFD: 0	Developmental tox-	HED reviewed 05/19/86
CASWELL: 861	LEL: 1.25 mg/kg/day	Evidence of	WHOADI: 0	NOEL/LEL for 2yr rat	
CFR: 180.138	10 ppm	ity in rats (liver & thy-	QSTAR: 1.1	dy are 5 & 50 mg/kg	
CFR185: 185.5750		roid) & mice (liver).		on liver enlargement.	
REG_GROUP:	LIST B Cancer: B2 (CRAVE)				
Tralomethrin	2yr feeding- rat	Decreased body weight	ADI UF: 100	No data gaps.	HED reviewed 03/30/89
CAS: 66841-25-6	NOEL: 0.75 mg/kg/day	gain in males; increased	OPPADI: 0.0075	2-Gen Repro Study is	EPA verified 04/20/89
EPA Chem Code: 121501	0 ppm	food & water	RFD: 0.0075	critical: NOEL=0.75	
CASWELL: 861AA	LEL: 3 mg/kg/day	in males and females.	WHOADI: 0	LEL=3 mg/kg	
CFR: 180.422	0 ppm	No evidence of	QSTAR: 0	body wt in parents &	
CFR185: 185.5450		enicity in rat or mouse.		during lactation).	On IRIS.
REG_GROUP:	Cancer: Negative- 2				
Triadimefon (Bayleton)	2yr feeding- dog	Decr food intake, wt	ADI UF: 300	Reproduction- rat	WHO reviewed 1985
CAS: 43121-43-3	NOEL: 11.4 mg/kg/day	incr ALP, cholesterol (F)	OPPADI: 0.04		HED reviewed 02/21/86
EPA Chem Code: 109901	330 ppm	decr GTP & creatinine	RFD: 0.03		EPA verified 03/11/86
CASWELL: 862AA	LEL: 33.67 mg/kg/day	levels.	WHOADI: 0.03		RfD/PR reviewed
CFR: 180.410	1000 ppm	Evidence of	QSTAR: 0		RfD/PR reviewed
CFR185: 185.800		ity in rats and mice.			On IRIS.
REG_GROUP:	LIST B Cancer: C (HCPRC)				
Triadimenol (Baytan)	2yr & 6mo feed-	Changes in enzyme	PADI UF: 100	Developmental tox- rat	HED reviewed 09/14/88
CAS: 55219-65-3	NOEL: 3.75 mg/kg/day	(The two studies were	OPPADI: 0.038	Developmental tox-	EPA deferred 10/12/88
EPA Chem Code: 127201	150 ppm	combined to establish	RFD: 0	(Both studies are core	HED reviewed 01/06/89
CASWELL: 074A	LEL: 15 mg/kg/day	NOEL and LEL.)	WHOADI: 0.05	grade supplementary).	WHO reviewed 1989
CFR: 180.450	600 ppm	Evidence of	QSTAR: 0		
CFR185:		ity in mice; neg. rats.			
REG_GROUP:	Cancer: C (HED)				
Triallate	2yr feeding- dog	Increased hemosiderin,	ADI UF: 100	No data gaps.	HED reviewed 10/10/86
CAS: 2303-17-5	NOEL: 1.275 mg/kg/day	SAP, and liver weights.	OPPADI: 0.013		EPA verified 12/16/86
EPA Chem Code: 078802	0 ppm	Doses calculated on	RFD: 0.013		
CASWELL: 870A	LEL: 4.25 mg/kg/day	of % a.i.	WHOADI: 0		
CFR: 180.314	0 ppm	Evidence of	QSTAR: 0.0832		
CFR185:		ity in mice (liver).			On IRIS.
REG GROUP:	LIST B Cancer: C(q) (HED)				

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CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Triasulfuron (Amber) CAS: 82097-50-5 EPA Chem Code: 128969 CASWELL: 861C CFR: 180.459 CFR185: REG_GROUP:	2yr feeding- mouse NOEL: 1.2 mg/kg/day 10 ppm LEL: 12.9 mg/kg/day 1000 ppm Newchemical Cancer: E (HED)	Centrilobular megaly in males. No evidence of enicity in rats or mice.	PADI UF: 100 OPPADI: 0.01 RFD: 0.01 WHOADI: 0 QSTAR: 0	Chronic feed/carcino- (Current study maybe graded).	HED reviewed 04/11/90 EPA verified 08/22/90 RfD/PR reviewed On IRIS.
Triazophos CAS: 24017-47-8 EPA Chem Code: 344600 CASWELL: 344G CFR: CFR185: REG_GROUP:	NOEL: 0 mg/kg/day 0 ppm LEL: 0 mg/kg/day 0 ppm Cancer:		UF: 0 OPPADI: 0 RFD: 0 WHOADI: 0.001 QSTAR: 0		WHO reviewed 1993
Tribenuron methyl (Express) CAS: 101200-48-0 EPA Chem Code: 128887 CASWELL: 419S CFR: 180.451 CFR185: REG_GROUP:	1yr feeding- dog NOEL: 0.79 mg/kg/day 25 ppm LEL: 8.16 mg/kg/day 250 ppm Cancer: C (HED); D (SAP)	Elevated serum bilirubin and AST levels, urinary volume. Evidence of ity in rats (F; mammary carcinoma); negative	ADI UF: 100 OPPADI: 0.008 RFD: 0.008 WHOADI: 0 QSTAR: 0.0446	No data gaps.	HED reviewed 09/14/88 EPA verified 10/12/88 On IRIS.
Tribuphos (DEF) CAS: 78-48-8 EPA Chem Code: 074801 CASWELL: 864 CFR: 180.272 CFR185: REG_GROUP:	1yr feeding- dog NOEL: 0.1 mg/kg/day 4 ppm LEL: 0.4 mg/kg/day 16 ppm LIST B Cancer: Interim C(q)	Plasma ChE inhibition. Reproduction Study itical: LEL = 0.2 mg/kg (LDT) based on Plasma RBC inhibition.	ADI UF: 100 OPPADI: 0.001 RFD: 0.00003 WHOADI: 0 QSTAR: 0	No data gaps. [Syn. DEF /Degreen]	HED pending 06/19/86 EPA verified 08/13/87 RfD/PR reviewed
Tributyltin Oxide (TBTO) CAS: 56-35-9 EPA Chem Code: 083001 CASWELL: 101 CFR: CFR185: REG GROUP:	30mo feeding- rat NOEL: 0.025 mg/kg/day 0.5 ppm LEL: 0.25 mg/kg/day 5 ppm LIST B Cancer: No available data.	Immunotoxicity.	PLD UF: 1000 OPPADI: 0.00003 RFD: 0.00003 WHOADI: 0 QSTAR: 0	Chronic feed/carcino- Chronic feeding- dog Reproduction- rat Developmental tox- rat Developmental tox-	EPA verified 10/14/87 HED concurs 10/14/87 On IRIS.

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CHEMICAL	STUDY TYPE			EFFECTS	REFERENCE DOSES			DATA GAPS/COMMENTS	STATUS
Trichlorfon (Trichlorphon)	10yr feeding-			Brain ChE inhibition (M).	ADI	UF:	100	No data gaps.	WHO reviewed 1978
CAS: 52-68-6	NOEL:	0	mg/kg/day	(Threshold effect)	OPPADI:		0.002		AD hoc meeting
EPA Chem Code: 057901		0	ppm		RFD:		0	Extra UF not necessary	RfD/PR reviewed
CASWELL: 385	LEL:	0.2	mg/kg/day		WHOADI:		0.01	since effect was	
CFR: 180.198		0	ppm	No evidence of	QSTAR:		0	ered to be threshold.	
CFR185:				enicity in rats or mice.					
REG_GROUP:	LIST A (6A)	Cancer:	E (HCPRC)						
Trichlorobenzyl chloride						UF:	0		
CAS: 1344-32-7	NOEL:	0	mg/kg/day		OPPADI:		0		
EPA Chem Code: 017304		0	ppm		RFD:		0		
CASWELL: 873A	LEL:	0	mg/kg/day		WHOADI:		0		
CFR: 180.273		0	ppm		QSTAR:		0		
CFR185:									
REG_GROUP:	Cancer:								
Triclopyr (salts & esters)	2gen reprod- rat			Increased incidence of	ADI	UF:	100	No data gaps.	RfD/PR reviewed
CAS: 55335-06-3	NOEL:	5	mg/kg/day	proximal tubular	OPPADI:		0.05		RfD/PR reviewed
EPA Chem Code: 116001		0	ppm	ation in male & female	RFD:		0	Triethylamine salt & But-	
CASWELL: 882I	LEL:	25	mg/kg/day	P1 & P2 rats.	WHOADI:		0	oxyethyl esther studies	
CFR: 180.417		0	ppm		QSTAR:		0	were also evluated.	
CFR185:								[Syn. Garlon]	
REG_GROUP:	LIST B	Cancer:	D (HCPRC)						
Tridemorph						UF:	0		
CAS: 24602-86-6	NOEL:	0	mg/kg/day		OPPADI:		0		
EPA Chem Code: 121401		0	ppm		RFD:		0		
CASWELL: 386	LEL:	0	mg/kg/day		WHOADI:		0		
CFR: 180.372		0	ppm		QSTAR:		0		
CFR185:									
REG_GROUP:	Cancer:								
Tridiphane (Tandem)	2gen reprod- rat			Decreased fertility index	ADI	UF:	100	No data gaps.	HED reviewed 03/21/86
CAS: 58138-08-2	NOEL:	0.33	mg/kg/day	decreased body	OPPADI:		0.003	NOEL adjusted for dec.	EPA verified 04/22/86
EPA Chem Code: 123901		0	ppm	dams.	RFD:		0.003	diet concentration	
CASWELL: 419D	LEL:	1.67	mg/kg/day	Evidence of	WHOADI:		0	lactation.	
CFR: 180.424		0	ppm	ity in female mice (liver	QSTAR:		0		
CFR185:				adenomas); neg. in rat.					On IRIS.
REG GROUP:	Cancer:	C (HED)							

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CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Triflumizole (Trifmine) CAS: 68694-11-1 EPA Chem Code: 128879 CASWELL: 888B CFR: CFR185: REG_GROUP:	3gen reprod- rat NOEL: 1.5 mg/kg/day 30 ppm LEL: 3.5 mg/kg/day 70 ppm Newchemical Cancer: E (RfD/PR	Incr gestation lengths. No evidence of enicity in rats or mice.	ADI UF: 100 OPPADI: 0.015 RFD: 0 WHOADI: 0 QSTAR: 0	No data gaps. The 1984 & 1986 tion studies were ed to develop a	RfD/PR deferred RfD/PR reviewed
Trifluralin (Treflan) CAS: 1582-09-8 EPA Chem Code: 036101 CASWELL: 889 CFR: 180.207 CFR185: 185.5900 REG_GROUP:	1yr feeding- dog NOEL: 2.4 mg/kg/day 0 ppm LEL: 40 mg/kg/day 0 ppm LIST A (6C) Cancer: C(q) (HED); 3	Decr in body wts, ocytes; incr in, liver wts, cholester- ol & triglyceride. Evidence of ity in rats; neg. in mice	ADI UF: 100 OPPADI: 0.024 RFD: 0.0075 WHOADI: 0 QSTAR: 0.0077	No data gaps. The 1984 1 year dog is co-critical; NOEL=0.75 mg/kg; LEL=3.75 mg/kg.	HED reassess 01/16/87 EPA verified 02/18/87 HED reassess 03/30/89 EPA verified 04/20/89 RfD/PR reviewed On IRIS.
Triflusulfuron-methyl CAS: 126535-15-7 EPA Chem Code: 129002 CASWELL: 944 CFR: CFR185: REG_GROUP:	2yr feeding- rat NOEL: 2.44 mg/kg/day 100 ppm LEL: 0 mg/kg/day 30.6 ppm Newchemical Cancer: C (HCPRC)	Decr body wt & body gain; alterations in the hematology parameters; incr incidence of inter- stitial cell hyperplasia in males.	ADI UF: 100 OPPADI: 0.024 RFD: 0 WHOADI: 0 QSTAR: 0	No data gaps. Evidence of ity in rats (interstitial cell adenomas)	RfD/PR reviewed
Triforine (Funginex) CAS: 26644-46-2 EPA Chem Code: 107901 CASWELL: 890AA CFR: 180.382 CFR185: 185.5950 REG_GROUP:	2yr feeding- dog NOEL: 2.5 mg/kg/day 100 ppm LEL: 25 mg/kg/day 1000 ppm LIST B Cancer: Negative- 2	Hemosiderosis of liver and bone marrow cells. No evidence of enicity in rats or mice.	ADI UF: 100 OPPADI: 0.025 RFD: 0 WHOADI: 0.02 QSTAR: 0	No data gaps.	WHO reviewed 1978 HED reviewed 11/19/86
Triiodobenzoic acid, 2,3,5- CAS: 88-82-4 EPA Chem Code: 009104 CASWELL: 890A CFR: 180.219 CFR185: REG GROUP:	NOEL: 0 mg/kg/day 0 ppm LEL: 0 mg/kg/day 0 ppm Cancer:		UF: 0 OPPADI: 0 RFD: 0 WHOADI: 0 QSTAR: 0		

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CHEMICAL	STUDY TYPE		EFFECTS	REFERENCE DOSES		DATA GAPS/COMMENTS	STATUS
Trimethacarb (Broot)	2yr feeding- rat		Histopathology in the	PLD UF:	1000	Chronic feed/carcino-	HED reviewed 05/08/86
CAS: 2686-99-9	NOEL:	2.5 mg/kg/day	liver, GI tract, and	OPPADI:	0.0025	Chronic feeding- dog	
EPA Chem Code: 102401		50 ppm	kidney.	RFD:	0	Reproduction- rat	
CASWELL: 893A	LEL:	10 mg/kg/day		WHOADI:	0	Developmental tox- rat	
CFR: 180.305		200 ppm	No valid carcinogenicity	QSTAR:	0	Developmental tox-	
CFR185:			data is available.				
REG_GROUP:	LIST A (6B)	Cancer: Undetermined.					
Trinexapac-ethyl				UF:			
CAS: 95266-40-3	NOEL:	0 mg/kg/day		OPPADI:	0		
EPA Chem Code: 112602		0 ppm		RFD:	0		
CASWELL: 271N	LEL:	0 mg/kg/day		WHOADI:	0		
CFR:		0 ppm		QSTAR:	0		
CFR185:						[Syn. Cimectacarb]	
REG_GROUP:	Newchemical	Cancer:					
Triphenyltin acetate				UF:			WHO reviewed 1970;
CAS: 900-95-8	NOEL:	0 mg/kg/day		OPPADI:	0		or in combination
EPA Chem Code: 496700		0 ppm		RFD:	0		Fentin compounds.
CASWELL: 896C	LEL:	0 mg/kg/day		WHOADI:	0.0005		
CFR:		0 ppm		QSTAR:	0		
CFR185:						[Syn. Fentin acetate]	
REG_GROUP:	Cancer:						
Triphenyltin chloride				UF:			WHO reviewed 1970;
CAS: 639-58-7	NOEL:	0 mg/kg/day		OPPADI:	0		or in combination
EPA Chem Code: 496500		0 ppm		RFD:	0		Fentin compounds.
CASWELL: 896D	LEL:	0 mg/kg/day		WHOADI:	0.0005		
CFR:		0 ppm		QSTAR:	0		
CFR185:						[Syn. Fentin chloride]	
REG_GROUP:	Cancer:						
Triphenyltin hydroxide	2-yr feeding - rat		Decr. leucocyte counts	ADI UF:	300	No data gaps.	WHO reviewed 1970;
CAS: 76-87-9	NOEL:	0.1 mg/kg/day	males - 1989 Chronic rat	OPPADI:	0.0003		or in combination
EPA Chem Code: 083601		2 ppm	study is co-critical.	RFD:	0		Fentin compounds.
CASWELL: 896E	LEL:	0.25 mg/kg/day		WHOADI:	0.0005		EPA deferred 03/21/90
CFR: 180.236		5 ppm	Evidence of	QSTAR:	2.8		HED deferred 06/06/91
CFR185:			ity in rats (F-pituitary)			[Syn. Fentin hydroxide]	RfD/PR reviewed
REG GROUP:	LIST A Cancer:		B2 (HED); B2				

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CHEMICAL	STUDY TYPE		EFFECTS	REFERENCE DOSES		DATA GAPS/COMMENTS	STATUS
Troysan polyphase (IPBC)	2yr feeding - rat		Decr body weight gain	PADI UF:	300	Chronic feeding- dog	RfD/PR reviewed
CAS: 55406-53-6	NOEL:	0 mg/kg/day	M; decr plasma ChE	OPPADI:	0.07		
EPA Chem Code: 107801		0 ppm	ition in M.	RFD:	0	Additional UF for lack of	
CASWELL: 501A	LEL:	20 mg/kg/day		WHOADI:	0	NOEL was not	
CFR:		0 ppm	No evidence of	QSTAR:	0	necessary.	
CFR185:			enicity in rats or mice.			[Syn: Troysan	
REG_GROUP:	LIST B Cancer:		E (HCPRC)				
UDMH				UF:			
CAS: 57-14-7	NOEL:	0 mg/kg/day		OPPADI:	0		
EPA Chem Code: 600018		0 ppm		RFD:	0		
CASWELL:	LEL:	0 mg/kg/day		WHOADI:	0		
CFR:		0 ppm		QSTAR:	0.46	Q* - 4.6 E-1 (M)	
CFR185:						3.1 E-1 (F)	
REG_GROUP:	Cancer: B2 (HED)						
UMP-488 (PAL 6000)	2yr feeding - rat		Decreased body weight	ADI UF:	100	No data gaps.	RfD/PR reviewed
CAS: 111578-32-6	NOEL:	4.4 mg/kg/day	gain in females.	OPPADI:	0.04		
EPA Chem Code: 129025		75 ppm		RFD:	0		
CASWELL: 551F	LEL:	23.1 mg/kg/day		WHOADI:	0		
CFR:		375 ppm	Referred to HED	QSTAR:	0		
CFR185:			enicity Peer Review				
REG_GROUP:	Newchemical	Cancer:	E (HCPRC)				
Uniconazole (Prunit)	1yr feeding- dog		Absolute & relative liver	PADI UF:	100	Developmental tox- rat	HED reviewed 08/10/90
CAS: 83657-17-4	NOEL:	2 mg/kg/day	weight changes in	OPPADI:	0.02	(Current study maybe	
EPA Chem Code: 128976		0 ppm		RFD:	0	graded).	
CASWELL: 207H	LEL:	20 mg/kg/day		WHOADI:	0		
CFR:		0 ppm	Evidence of	QSTAR:	0		
CFR185:			ity in male mice (liver).				
REG_GROUP:	Newchemical	Cancer:	C (HED)				
Vamidothion				UF:	0		WHO reviewed 1988
CAS: 2275-23-2	NOEL:	0 mg/kg/day		OPPADI:	0		
EPA Chem Code: 379200		0 ppm		RFD:	0		
CASWELL: 379A	LEL:	0 mg/kg/day		WHOADI:	0.008		
CFR:		0 ppm		QSTAR:	0		
CFR185:							
REG GROUP:	Cancer:						

OFFICE OF PESTICIDES PROGRAMS REFERENCE DOSE TRACKING REPORT

CHEMICAL	STUDY TYPE		EFFECTS	REFERENCE DOSES		DATA GAPS/COMMENTS	STATUS
Vancide TH			Since this chemical is	UF:			RfD/PR reviewed
CAS: 7779-27-3	NOEL:	0 mg/kg/day	not intended for food	OPPADI:	0		
EPA Chem Code: 082901		0 ppm	uses & since chronic or	RFD:	0		
CASWELL: 481B	LEL:	0 mg/kg/day	life time exposure is an	WHOADI:	0		
CFR:		0 ppm	unlikely scenario, an	QSTAR:	0	[Syn. hydro-s-triazine]	
CFR185:			was not established.				
REG_GROUP:	LIST C	Cancer.					
Vernolate (Vernam)	2gen reprod- rat		decreased body weight.	PLD	UF: 1000	Chronic feed/carcino-	HED reviewed 09/05/86
CAS: 1929-77-7	NOEL:	1 mg/kg/day		OPPADI:	0.001	Chronic feeding - dog	EPA verified 09/24/86
EPA Chem Code: 041404		20 ppm		RFD:	0.001	Developmental tox- rat	
CASWELL: 711	LEL:	5 mg/kg/day	No evidence of	WHOADI:	0	Developmental tox-	
CFR: 180.240		100 ppm	enicity in mice, no data	QSTAR:	0	Extra Uf of 10 to	
CFR185:			on rats.			for data gaps.	On IRIS.
REG_GROUP:	LIST B	Cancer. Negative - 1					
Vindozolin (Ronilan)	2yr feeding- rat		Eosinophilic foci in the	ADI	UF: 100	No data gaps.	HED reviewed 05/19/86
CAS: 50471-44-8	NOEL:	1.2 mg/kg/day	liver & foam cell aggreg-	OPPADI:	0.012		EPA verified 07/08/86
EPA Chem Code: 113201		25 ppm	ates in lungs (M); lenti-	RFD:	0.025		WHO reviewed 1988
CASWELL: 323C	LEL:	2.3 mg/kg/day	cular degeneration & int-	WHOADI:	0.07		RfD/PR reviewed
CFR: 180.380		50 ppm	erstitial cell lipidosis	QSTAR:	0		
CFR185: 185.1850			in ovaries (F).				On IRIS.
REG_GROUP:	LIST B	Cancer. B2 (HCPRC)					
Warfarin	Human Clinical		Increased prothrombin		UF: 100	Critical study and data	EPA verified 05/15/86
CAS: 81-81-2	NOEL:	0 mg/kg/day	time.	OPPADI:	0	base not reviewed by	
EPA Chem Code: 086002		0 ppm		RFD:	0.0003	RfD/PR Committee.	
CASWELL: 903	LEL:	0.029 mg/kg/day		WHOADI:	0		
CFR:		0 ppm		QSTAR:	0		
CFR185:							On IRIS.
REG_GROUP:	LIST A -	Cancer.					
White phosphorus (WP)	1gen reprod- rat		Increase in mortality	PLD	UF: 1000	Chronic feed/carcino-	EPA verified 05/17/90
CAS: 7723-14-6	NOEL:	0.015 mg/kg/day	rate (53%).	OPPADI:	0.00002	Chronic feeding- dog	HED concurrs 05/17/90
EPA Chem Code: 066502		0 ppm		RFD:	0.00002	Reproduction- rat	
CASWELL: 663	LEL:	0.075 mg/kg/day		WHOADI:	0	Developmental tox- rat	
CFR:		0 ppm	No carcinogenicity stud-	QSTAR:	0	Developmental tox-	
CFR185:			ies available.				On IRIS.
REG GROUP:	LIST C	Cancer. D (CRAVE)					

OFFICE OF PESTICIDES PROGRAMS REFERENCE DOSE TRACKING REPORT

CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Xylenol, 2,4-	90d feeding- mice	Clinical signs (lethargy,	PLD UF: 3000	Chronic feed/carcino-	EPA verified 02/21/90
CAS: 105-67-9	NOEL: 50 mg/kg/day	prostration, and ataxia)	OPPADI: 0.02	Chronic feeding- dog	HED concurrs 02/21/90
EPA Chem Code: 086804	0 ppm	& hematological	RFD: 0.02	Reproduction- rat	
CASWELL: 907A	LEL: 250 mg/kg/day		WHOADI: 0	Developmental tox- rat	
CFR:	0 ppm	No carcinogenicity stud-	QSTAR: 0	Developmental tox-	
CFR185:		ies are available.			
REG_GROUP:	LIST D Cancer.				
Xylenes	2yr feeding- rat	Hyperactivity,	UF: 100	Critical study and data	EPA verified 03/19/87
CAS: 1330-20-7	NOEL: 179 mg/kg/day	body weight and	OPPADI: 0	base not reviewed by	
EPA Chem Code: 086802	0 ppm	mortality (males).	RFD: 2	RfD/P R Committee.	
CASWELL: 906	LEL: 357 mg/kg/day		WHOADI: 0		
CFR:	0 ppm		QSTAR: 0		
CFR185:					On IRIS.
REG_GROUP:	LIST C Cancer. D (CRAVE)				
Zectran (Mexacarbate)			UF: 0		
CAS: 315-18-4	NOEL: 0 mg/kg/day		OPPADI: 0		
EPA Chem Code: 044201	0 ppm		RFD: 0		
CASWELL: 579B	LEL: 0 mg/kg/day		WHOADI: 0		
CFR:	0 ppm		QSTAR: 0		
CFR185:					
REG_GROUP:	LIST B Cancer.				
Zinc phosphide			UF: 0	No RfD was	EPA verified 05/15/86
CAS: 1314-84-7	NOEL: 0 mg/kg/day		OPPADI: 0	Defined as food use;	RfD/P R reviewed
EPA Chem Code: 088601	0 ppm		RFD: 0.0003	ever, considered	
CASWELL: 922	LEL: 0 mg/kg/day		WHOADI: 0	nation issue and	
CFR: 180.284	0 ppm		QSTAR: 0	expected to be minimal	
CFR185:				nonexistent.	On IRIS.
REG_GROUP:	LIST A (6A) Cancer.				
Zinc sulfate (basic)			UF: 0		
CAS: 68813-94-5	NOEL: 0 mg/kg/day		OPPADI: 0		
EPA Chem Code: 089101	0 ppm		RFD: 0		
CASWELL: 928	LEL: 0 mg/kg/day		WHOADI: 0		
CFR: 180.244	0 ppm		QSTAR: 0		
CFR185:					
REG GROUP:	LIST D Cancer.				

OFFICE OF PESTICIDES PROGRAMS REFERENCE DOSE TRACKING REPORT

CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Zineb	2yr feeding- rat	Thyroid hyperplasia- no	UF: 500	Chronic feed/carcino-	OPP pending- HED to
CAS: 12122-67-7	NOEL: 0 mg/kg/day	NOEL was established	OPPADI: 0	Chronic feeding- dog	uate 2yr rat study
EPA Chem Code: 014506	0 ppm	this effect (study used	RFD: 0.05	Reproduction- rat	EPA verified 02/05/86
CASWELL: 930	LEL: 25 mg/kg/day	by ORD).	WHOADI: 0.03		WHO reviewed 1993
CFR: 180.115	500 ppm		QSTAR: 0	HED and ODW need to	
CFR185:				reconciled.	On IRIS.
REG_GROUP:	LIST B Cancer: 3 (IARC)				
Zinofos (Thionazin)	90d feeding- dog	Decreased body	PLD UF: 1000	Chronic feed/carcino-	HED pending 01/30/87
CAS: 297-97-2	NOEL: 0.05 mg/kg/day	(IBT study).	OPPADI: 0.00005	Chronic feeding- dog	
EPA Chem Code: 032401	2 ppm		RFD: 0	Reproduction- rat	
CASWELL: 345	LEL: 0.2 mg/kg/day		WHOADI: 0	Developmental tox- rat	
CFR: 180.264	8 ppm	No acceptable	QSTAR: 0	Developmental tox-	
CFR185:		icity data available.			
REG_GROUP:	Cancer: Undetermined.				
Ziram			UF: 0	Insufficient data for RfD	WHO reviewed 1980
CAS: 137-30-4	NOEL: 0 mg/kg/day		OPPADI: 0	derivation.	HED reviewed 07/25/86
EPA Chem Code: 034805	0 ppm		RFD: 0		HED reviewed 03/06/87
CASWELL: 931	LEL: 0 mg/kg/day	Evidence of	WHOADI: 0.02		Ad hoc meeting
CFR: 180.116	0 ppm	ity in rats and mice.	QSTAR: 0		
CFR185:		(NTP- unreviewed			
REG_GROUP:	LIST B Cancer: Positive- NTP				
Azoxystrobin	2yr feeding- rat	Reduced body weights	ADI UF: 100	No data gaps.	RfD/PR reviewed
CAS: 131860-33-8	NOEL: 18.2 mg/kg/day	bile duct lesions (M).	OPPADI: 0.18		
EPA Chem Code: 128810	300 ppm		RFD:		
CASWELL:	LEL: 34 mg/kg/day		WHOADI:		
CFR:	750 ppm	No evidence of	QSTAR:		
CFR185:		enicity in rats or mice.			
REG_GROUP:	Newchemical Cancer: Not Likely (RFDC)				
Chlorine dioxide			UF:		
CAS: 10049-04-4	NOEL: mg/kg/day		OPPADI:		
EPA Chem Code: 020503	ppm		RFD:		
CASWELL: 179A	LEL: mg/kg/day		WHOADI:		
CFR:	ppm		QSTAR:		
CFR185:					
REG GROUP:	LIST D Cancer:				

OFFICE OF PESTICIDES PROGRAMS REFERENCE DOSE TRACKING REPORT

CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Sodium chlorite CAS: 7758-19-2 EPA Chem Code: 020502 CASWELL: 755 CFR: CFR185: REG_GROUP:	NOEL: mg/kg/day ppm LEL: mg/kg/day ppm LIST D Cancer:		UF: OPPADI: RFD: WHOADI: QSTAR:		
Thiafluamide (FOE 5043) CAS: 142459-58-3 EPA Chem Code: 121903 CASWELL: CFR: CFR185: REG_GROUP:	2yr feeding- rat NOEL: mg/kg/day ppm LEL: 1.2 mg/kg/day 25 ppm Newchemical Cancer: Not Likely (RFDC)	Methemoglobinema & organ effects in blood, kidney, spleen, heart & uterus. No evidence of enicity in rats or mice.	PADI UF: 1000 OPPADI: 0.001 RFD: WHOADI: QSTAR:	RFDC recommended Developmental/Neurotox ity Study be performed.	RfD/PR reviewed
AC 299,263 CAS: 11431-32-91 EPA Chem Code: 129171 CASWELL: CFR: CFR185: REG_GROUP:	Develop tox- rabbit NOEL: 300 mg/kg/day ppm LEL: 600 mg/kg/day ppm Newchemical Cancer: Not Likely (RFDC)	Reduced food No evidence of enicity in rats or mice.	ADI UF: 100 OPPADI: 3 RFD: WHOADI: QSTAR:	No data gaps.	RfD/PR reviewed
Benomyl CAS: 17804-35-2 EPA Chem Code: 099101 CASWELL: 075A CFR: 180.294 CFR185: REG_GROUP:	2yr feeding- dog NOEL: 2.5 mg/kg/day 500 ppm LEL: 12.5 mg/kg/day 2500 ppm LIST A (6C) Cancer: C(q) (HED); C	Liver cirrhosis & bile duct proliferation. (Test material was MBC, major breakdown of Benomyl).	ADI UF: 100 OPPADI: 0.025 RFD: 0.05 WHOADI: 0.02 QSTAR: 0.0042	No data gaps.	WHO reviewed EPA verified 03/26/86 RfD/PR reviewed
Alpha-Metolachlor CAS: 87392-12-9 EPA Chem Code: 108800	NOEL: mg/kg/day		UF: OPPADI:		

2 米国における調査対象農薬の使用状況

1997 Pesticide Use Maps

Click on a compound name to see a map indicating it's use

(1992 pesticide use maps available here)

Caution: The pesticide use maps available from this site show regional-scale patterns of use intensity within the United States and are not intended for making local-scale estimates of pesticide use, such as for individual counties. The maps are based state-level estimates of pesticide use rates for individual crops, which have been compiled by the National Center for Food and Agricultural Policy (NCFAP) for 1995-1998, and on 1997 Census of Agriculture county crop acreage. Key limitations include: (1) state use-coefficients represent an average for the entire state and consequently do not reflect the local variability of pesticide management practices found within many states and counties, and (2) the county-level acreage are based on the 1997 Census of Agriculture and may not represent all crop acreage due to Census non-disclosure rules. Please refer to Method for Estimating Pesticide Use for a detailed discussion of how the pesticide use data were developed.

# - Cr	Cy - Fenb	Feno - Metho	Methy - Pyridab	Pryidat - Z
"1,3-d"	cyanazine	fenoxaprop	methyl bromide	pyridate
"2,4-d"	cyclanilide	fenpropathrin	methyl parathion	pyriproxyfen
"2,4-db"	cycloate	ferbam	metiram	pyrithiobac
abamectin	cyfluthrin	fluazifop	metolachlor	quinclorac
acephate	cymoxanil	flumetralin	metribuzin	quizalofop
acetochlor	cypermethrin	flumetsulam	metsulfuron	rimsulfuron
acifluorfen	cyromazine	flumiclorac	molinate	sethoxydim
alachlor	cytokinins	fluometuron	msma	simazine
aldicarb	dcna	flutolanil	myclobutanil	sodium chlorate
ametryn	dcpa	fomesafen	naa	spinosad
amitraz	deltamethrin	fonofos	nad	streptomycin
asulam	desmedipham	formetanate hcl	naled	sulfentrazone
atrazine	diazinon	fosetyl al	napropamide	sulfur
azadirachtin	dicamba	gibberellic acid	naptalam	sulfuric acid
azinphos methyl	dichlobenil	glyphosate	nicosulfuron	sulprofos
azoxystrobin	diclofop	halosulfuron	norflurazon	tebuconazole
benefin	dicofol	hexazinone	oil	tebufenozide
benomyl	dicrotophos	hexythiazox	oryzalin	tebupirimphos
bensulfuron	difenzoquat	imazamethabenz	oxamyl	tebuthiuron
bensulide	diflubenzuron	imazapic	oxydemeton methyl	tefluthrin
bentazon	dimethenamid	imazaquin	oxyfluorfen	terbacil

benzyladenine	dimethipin	imazethapyr	oxytetracycline	terbufos
bifenthrin	dimethoate	imidacloprid	oxythioquinox	thidiazuron
bromacil	dimethomorph	iprodione	paraquat	thifensulfuron
bromoxynil	diquat	lactofen	pcnb	thiobencarb
buprofezin	disulfoton	lambdacyhalothrin	pebulate	thiodicarb
butenoic acid	diuron	lindane	pendimethalin	thiophanate methyl
butylate	dodine	linuron	permethrin	thiram
cacodylic acid	dsma	malathion	phenmedipham	tralomethrin
captan	endosulfan	maleic hydrazide	phorate	triadimefon
carbaryl	endothall	mancozeb	phosmet	triallate
carbofuran	eptc	maneb	picloram	triasulfuron
chlorethoxyfos	esfenvalerate	mcpa	primisulfuron	tribenuron
chlorimuron	ethalfluralin	mcpb	profenofos	tribufos
chloropicrin	ethephon	mcpp	prometryn	triclopyr
chlorothalonil	ethion	mefenoxam	pronamide	triflumizole
chlorpyrifos	ethofumesate	mepiquat chloride	propachlor	trifluralin
chlorsulfuron	ethoprop	metalaxyl	propamocarb	triflusulfuron
clethodim	ethyl parathion	metaldehyde	propanil	triforine
clofentezine	etridiazole	metam sodium	propargite	triphenyltin hyd
clomazone	fenamiphos	methamidophos	propiconazole	vernolate
clopyralid	fenarimol	methidathion	prosulfuron	vinclozolin
copper	fenbuconazole	methomyl	pyrazon	ziram
cryolite	fenbutatin oxide	methoxychlor	pyridaben	

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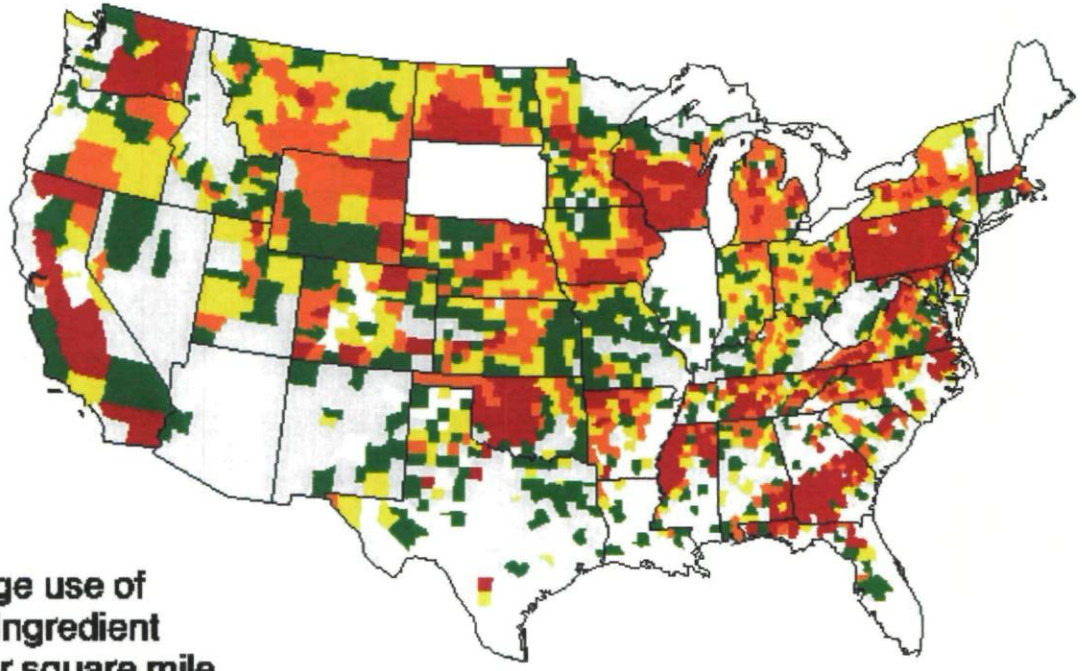
How are we doing? Contact: webmaster@maildcascr.wr.usgs.gov

2,4-db - HERBICIDES
ESTIMATED ANNUAL AGRICULTURAL USE



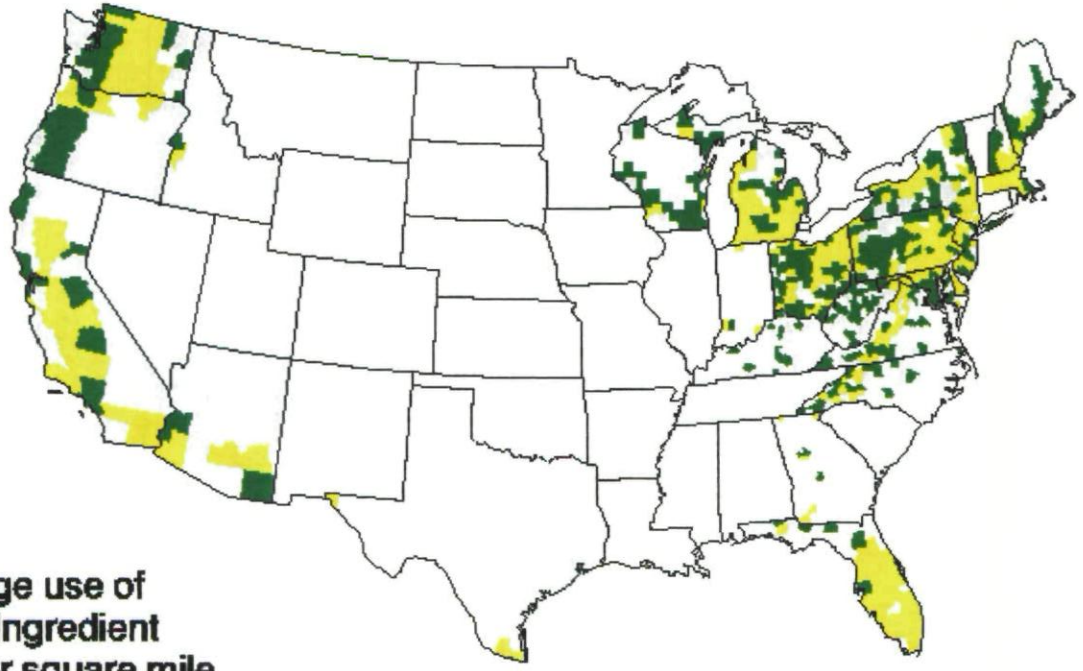
Average use of
Active Ingredient
Pounds per square mile
of county per year

- No Estimated Use
- < 0.027
- 0.027 - 0.065
- 0.066 - 0.129
- 0.130 - 0.280
- >= 0.281

Crops	Total Pounds Applied	Percent National Use
alfalfa	381,797	64.93
peanuts	159,838	27.18
soybeans	31,896	5.42
other hay	6,826	1.16
mint	6,731	1.14
	945	0.16

http://ca.water.usgs.gov/pnsp/pesticide_use_maps_1997/maps/W1308.png

ABAMECTIN - INSECTICIDES
ESTIMATED ANNUAL AGRICULTURAL USE



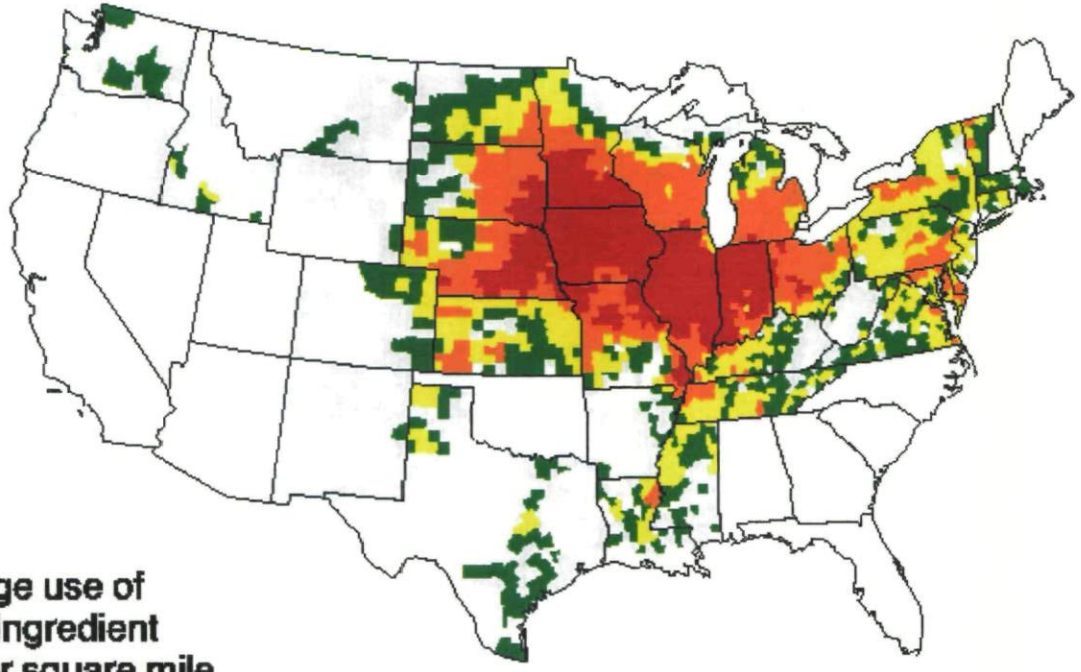
Average use of
Active Ingredient
Pounds per square mile
of county per year

- No Estimated Use
- < 0.000
- 0.000 - -0.001
- >= 0.000

Crops	Total Pounds Applied	Percent National Use
citrus	4,083	29.48
cotton	3,721	26.86
pears	1,100	7.94
apples	1,093	7.89
strawberries	795	5.74
hops	785	5.67
tomatoes	681	4.92
lettuce	597	4.31
almonds	243	1.75
celery	231	1.67

http://ca.water.usgs.gov/pnsp/pesticide_use_maps_1997/maps/W6001.png

ACETOCHLOR - HERBICIDES
ESTIMATED ANNUAL AGRICULTURAL USE



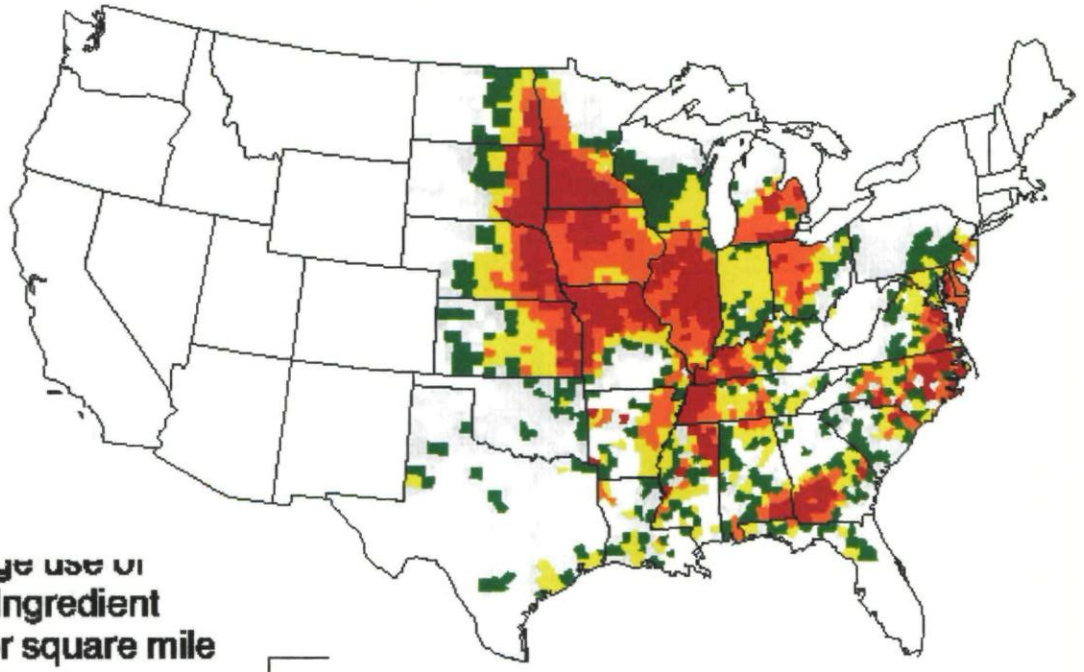
Average use of
Active Ingredient
Pounds per square mile
of county per year

- No Estimated Use
- < 0.347
- 0.347 - 1.927
- 1.928 - 8.628
- 8.629 - 52.722
- >= 52.723

Crops	Total Pounds Applied	Percent National Use
corn	32, 576, 954	100. 00

http://ca.water.usgs.gov/pnsp/pesticide_use_maps_1997/maps/W3000.png

ACIFLUORFEN - HERBICIDES
ESTIMATED ANNUAL AGRICULTURAL USE



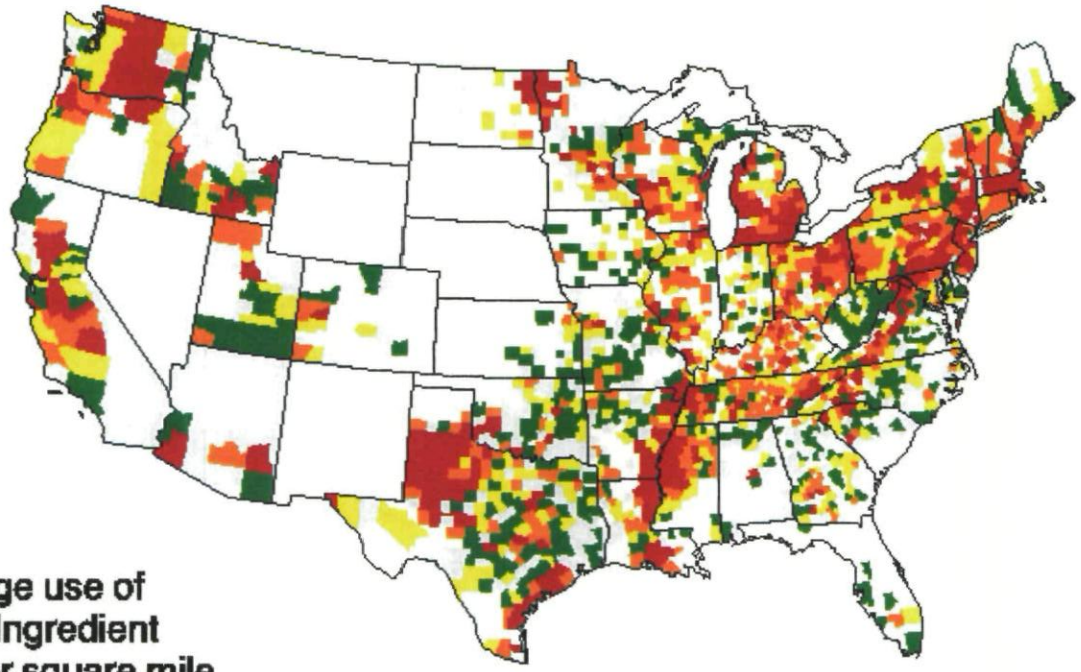
Average use of
Active Ingredient
inds per square mile
of county per year

- No Estimated Use
- < 0.043
- 0.043 - 0.217
- 0.218 - 0.799
- 0.800 - 2.202
- >= 2.203

	Total Pounds Applied	Percent National Use
so	1, 705, 603	92. 46
pe	112, 526	6. 10
ric	26, 516	1. 44
e		

http://ca.water.usgs.gov/pnsp/pesticide_use_maps_1997/maps/W1002.png

AZINPHOS METHYL - INSECTICIDES
ESTIMATED ANNUAL AGRICULTURAL USE



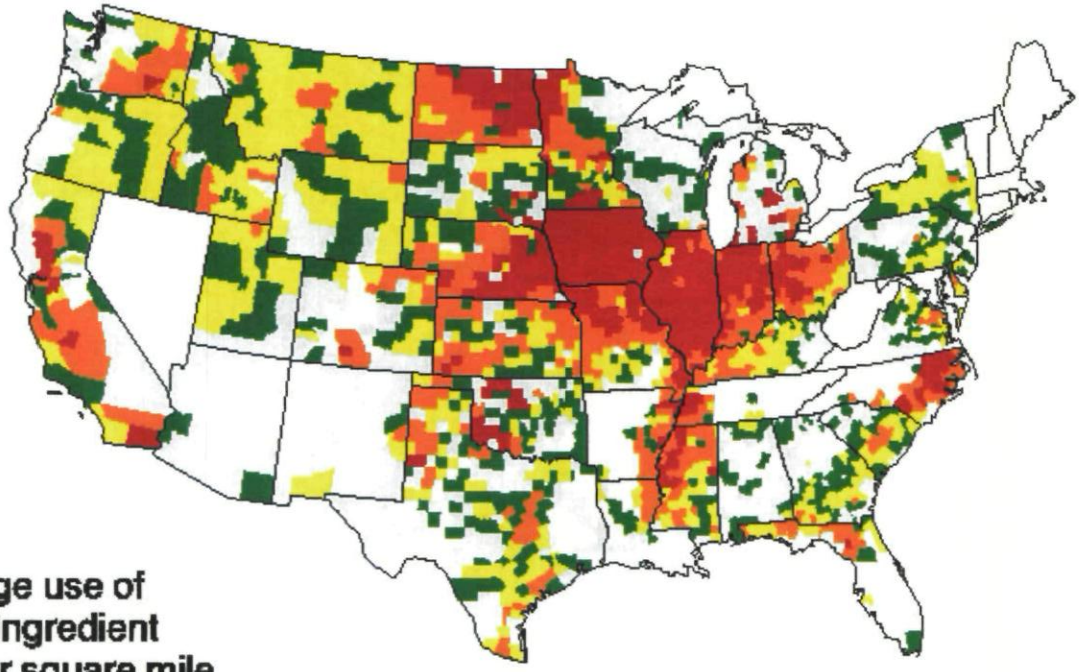
Average use of
Active Ingredient
Pounds per square mile
of county per year

- No Estimated Use
- < 0.008
- 0.008 - 0.035
- 0.036 - 0.122
- 0.123 - 0.481
- >= 0.482

Crops	Total Pounds Applied	Percent National Use
apples	1, 055, 258	51. 94
cotton	234, 166	11. 53
almonds	157, 042	7. 73
pears	144, 487	7. 11
cherries	92, 210	4. 54
peaches	91, 008	4. 48
potatoes	76, 685	3. 77
walnuts	51, 582	2. 54
pistachios	28, 648	1. 41
pecans	19, 105	0. 94

http://ca.water.usgs.gov/pnsp/pesticide_use_maps_1997/maps/W6004.png

BROMOXYNIL - HERBICIDES
ESTIMATED ANNUAL AGRICULTURAL USE



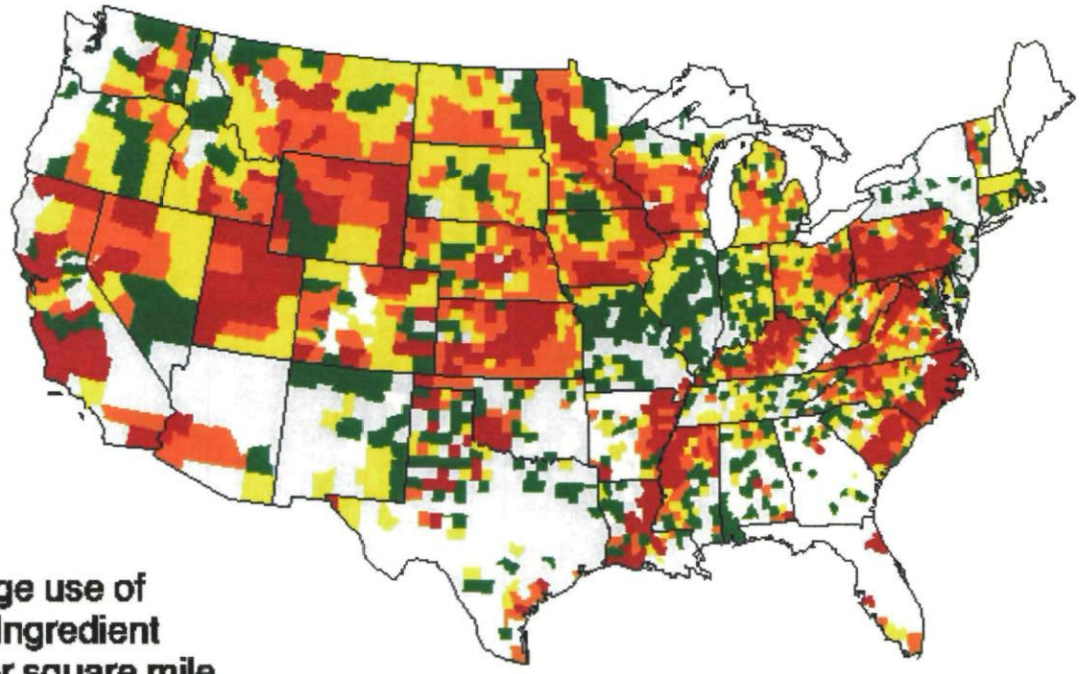
Average use of
Active Ingredient
Pounds per square mile
of county per year

- No Estimated Use
- < 0.007
- 0.007 - 0.027
- 0.028 - 0.107
- 0.108 - 0.866
- >= 0.867

Crops	Total Pounds Applied	Percent National Use
wheat	1, 251, 676	43. 10
corn	1, 044, 877	35. 98
barley	243, 390	8. 38
sorghum	133, 489	4. 60
cotton	75, 347	2. 59
alfalfa	36, 806	1. 27
oats	36, 180	1. 25
onions	25, 965	0. 89
mint	15, 459	0. 53
	14, 703	0. 51

http://ca.water.usgs.gov/pnsp/pesticide_use_maps_1997/maps/W1116.png

CARBOFURAN - INSECTICIDES
ESTIMATED ANNUAL AGRICULTURAL USE



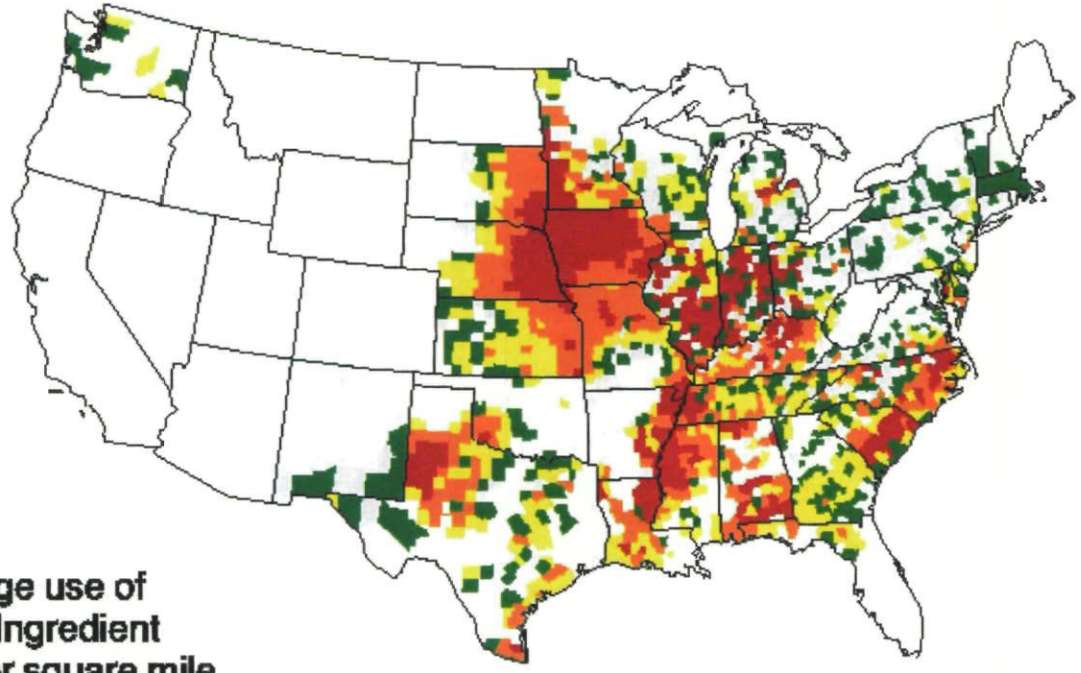
Average use of
Active Ingredient
Pounds per square mile
of county per year

- No Estimated Use
- < 0.029
- 0.029 - 0.086
- 0.087 - 0.187
- 0.188 - 0.430
- >= 0.431

Crops	Total Pounds Applied	Percent National Use
corn	1, 729, 818	51. 36
alfalfa	609, 940	18. 11
rice	284, 013	8. 43
potatoes	228, 965	6. 80
cotton	188, 901	5. 61
grapes	105, 184	3. 12
sorghum	66, 392	1. 97
wheat	46, 637	1. 38
sweet corn	20, 684	0. 61
barley	18, 440	0. 55

http://ca.water.usgs.gov/pnsp/pesticide_use_maps_1997/maps/W6007.png

CLOMAZONE - HERBICIDES
ESTIMATED ANNUAL AGRICULTURAL USE



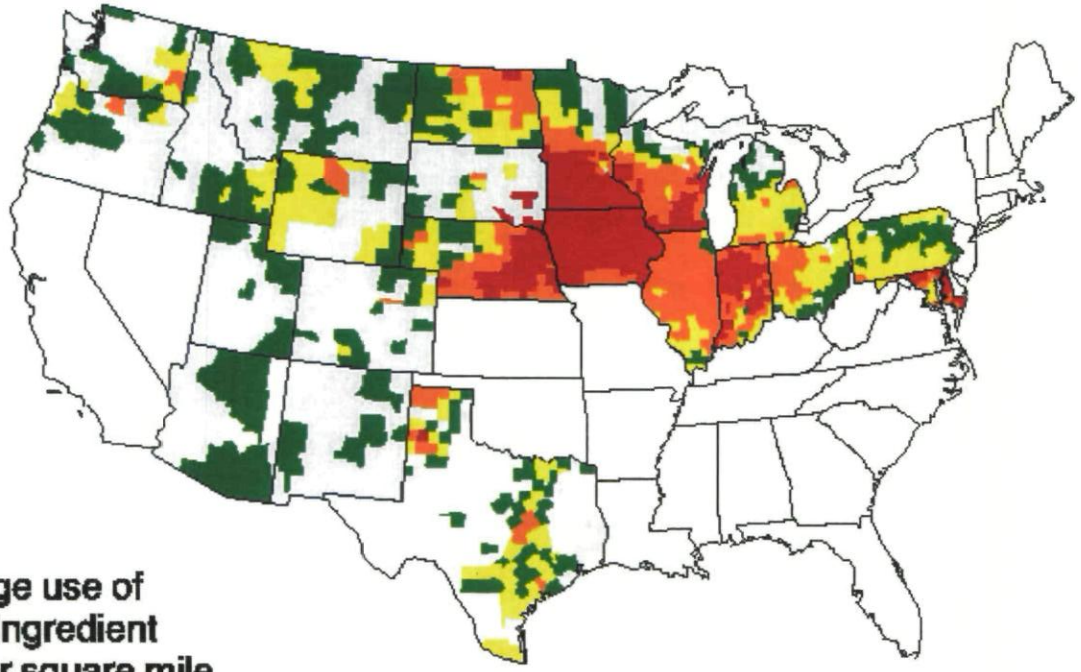
Average use of
Active Ingredient
Pounds per square mile
of county per year

- No Estimated Use
- < 0.009
- 0.009 - 0.058
- 0.059 - 0.436
- 0.437 - 2.200
- >= 2.201

Crops	Total Pounds Applied	Percent National Use
soybeans	1, 637, 409	65. 11
cotton	585, 722	23. 29
tobacco	217, 110	8. 63
sweet potatoes	38, 146	1. 52
pumpkins	14, 682	0. 58
green peas	10, 797	0. 43
cucumbers	4, 773	0. 19
squash	2, 649	0. 11
sweet peppers	1, 305	0. 05
green beans	912	0. 04

http://ca.water.usgs.gov/pnsp/pesticide_use_maps_1997/maps/W9001.png

CLOPYRALID - HERBICIDES
ESTIMATED ANNUAL AGRICULTURAL USE



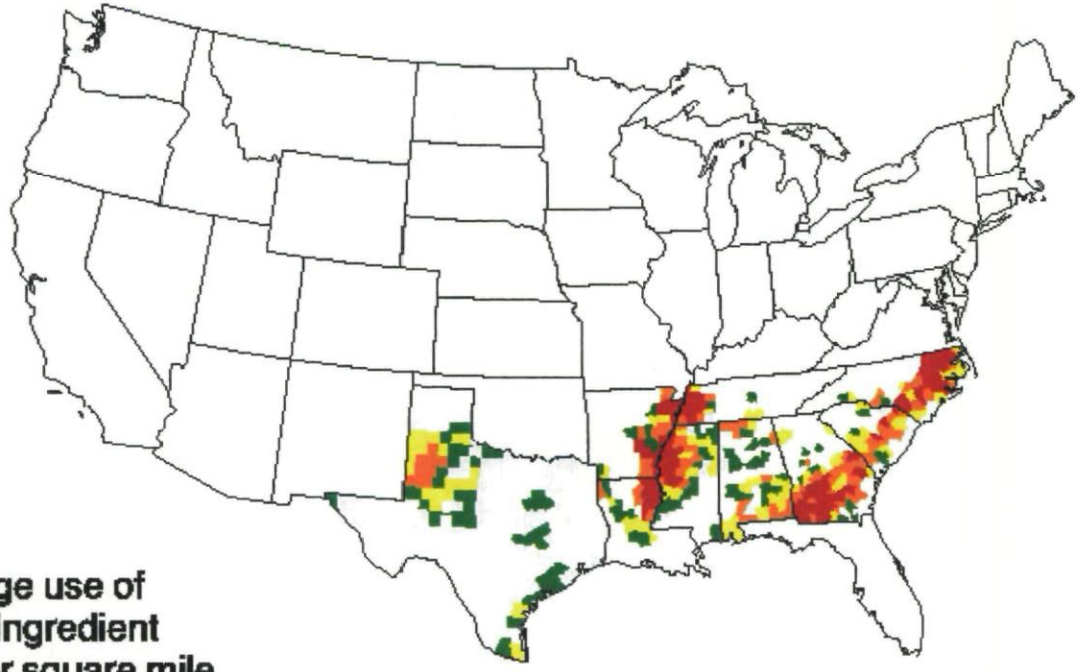
Average use of
Active Ingredient
Pounds per square mile
of county per year

- No Estimated Use
- < 0.008
- 0.008 - 0.050
- 0.051 - 0.229
- 0.230 - 0.719
- >= 0.720

Crops	Total Pounds Applied	Percent National Use
corn	336, 956	38. 13
wheat	295, 980	33. 49
sugarbeets	150, 059	16. 98
pasture	55, 062	6. 23
barley	25, 354	2. 87
oats	9, 672	1. 09
other hay	6, 033	0. 68
mint	2, 797	0. 32
asparagus	1, 357	0. 15
	205	0. 02

http://ca.water.usgs.gov/pnsp/pesticide_use_maps_1997/maps/W4002.png

CYCLANILIDE - OTHER PESTICIDES
ESTIMATED ANNUAL AGRICULTURAL USE



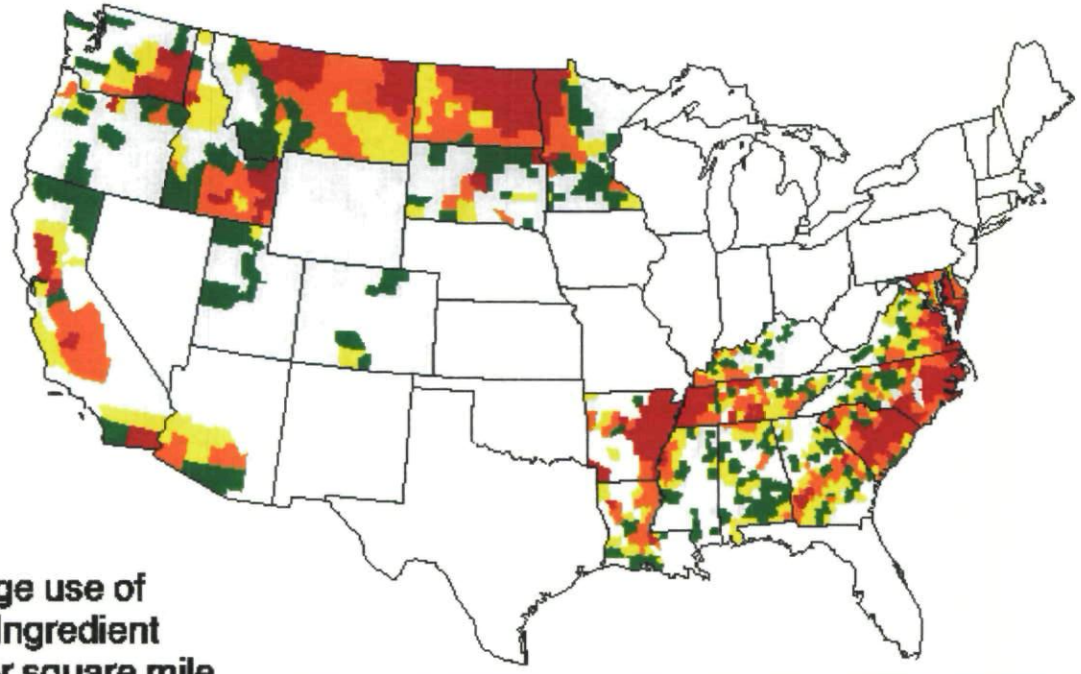
Average use of
Active Ingredient
Pounds per square mile
of county per year

- No Estimated Use
- < 0.030
- 0.030 - 0.116
- 0.117 - 0.389
- 0.390 - 1.310
- >= 1.311

Crops	Total Pounds Applied	Percent National Use
cotton	175, 791	100. 00

http://ca.water.usgs.gov/pnsp/pesticide_use_maps_1997/maps/W2007.png

DICLOFOP - HERBICIDES
ESTIMATED ANNUAL AGRICULTURAL USE



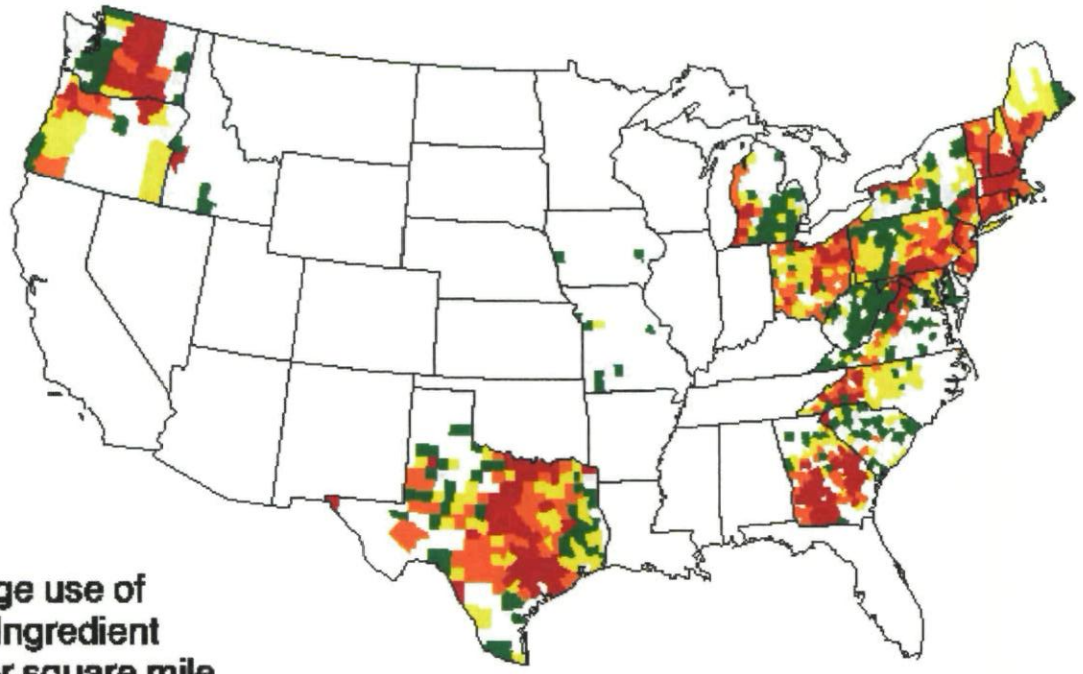
Average use of
Active Ingredient
Pounds per square mile
of county per year

- No Estimated Use
- < 0.018
- 0.018 - 0.073
- 0.074 - 0.255
- 0.256 - 0.867
- >= 0.868

Crops	Total Pounds Applied	Percent National Use
wheat	767, 766	78. 90
barley	205, 288	21. 10

http://ca.water.usgs.gov/pnsp/pesticide_use_maps_1997/maps/W1005.png

DODINE - FUNGICIDES
ESTIMATED ANNUAL AGRICULTURAL USE



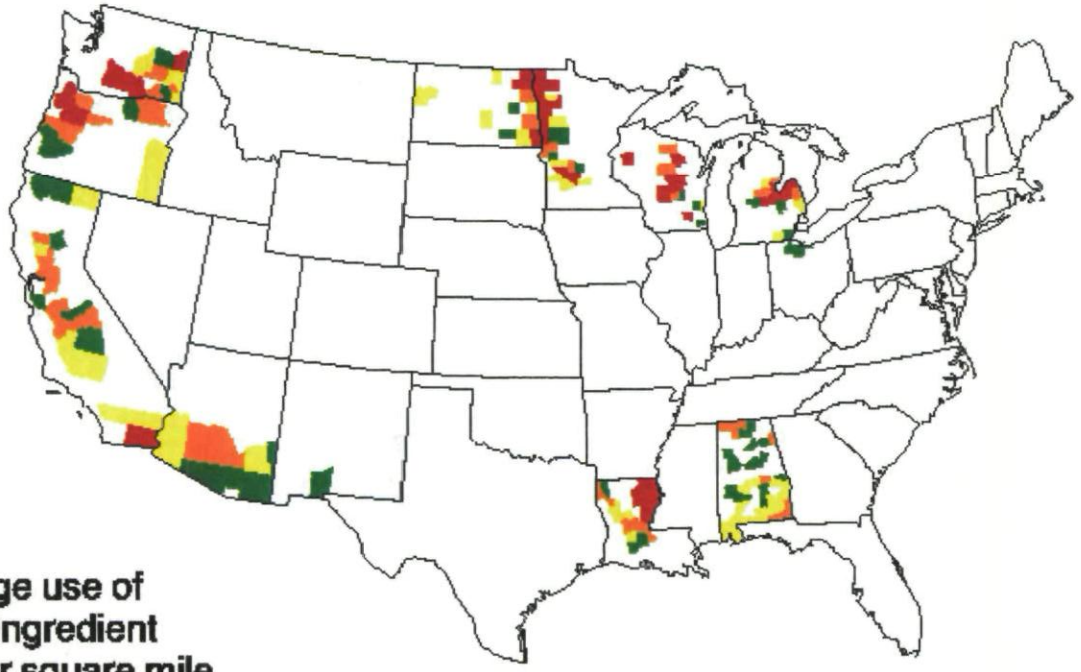
Average use of
Active Ingredient
Pounds per square mile
of county per year

- No Estimated Use
- < 0.002
- 0.002 - 0.008
- 0.009 - 0.028
- 0.029 - 0.119
- >= 0.120

Crops	Total Pounds Applied	Percent National Use
apples	45,538	30.96
pears	41,910	28.49
cherries	29,971	20.38
pecans	27,233	18.51
peaches	2,434	1.66

http://ca.water.usgs.gov/pnsp/pesticide_use_maps_1997/maps/W5033.png

ENDOTHALL - HERBICIDES
ESTIMATED ANNUAL AGRICULTURAL USE



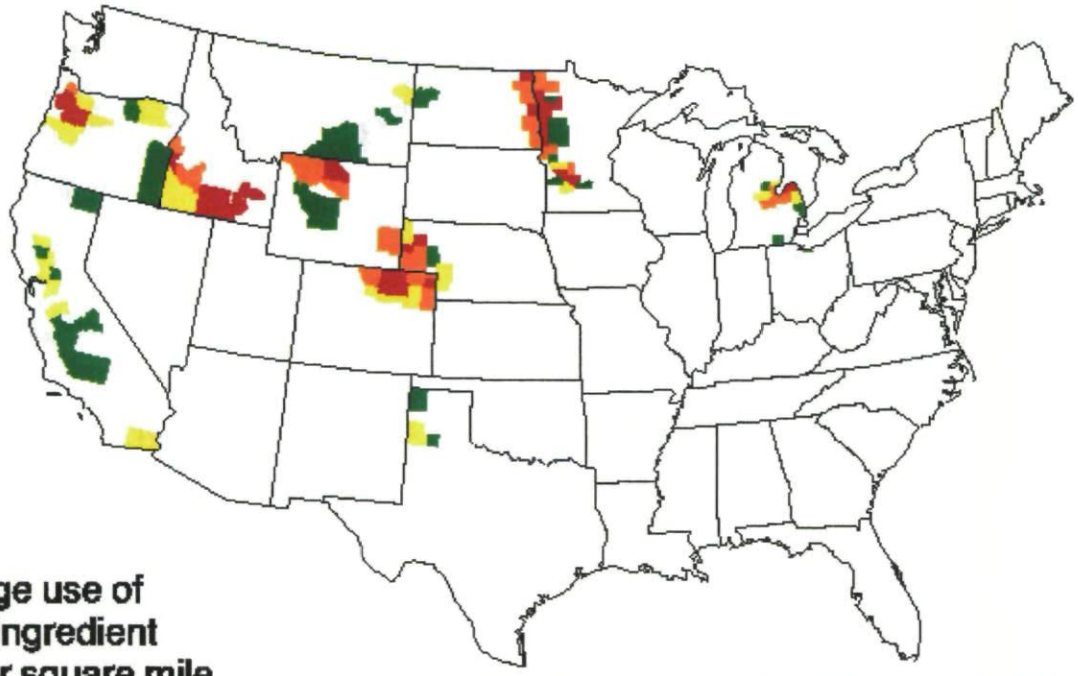
Average use of
Active Ingredient
Pounds per square mile
of county per year

- No Estimated Use
- < 0.003
- 0.003 - 0.013
- 0.014 - 0.051
- 0.052 - 0.178
- >= 0.179

Crops	Total Pounds Applied	Percent National Use
cotton	31, 825	40. 07
hops	18, 708	23. 56
sugarbeets	11, 061	13. 93
potatoes	9, 741	12. 26
	8, 084	10. 18

http://ca.water.usgs.gov/pnsp/pesticide_use_maps_1997/maps/W1948.png

ETHOFUMESATE - HERBICIDES
ESTIMATED ANNUAL AGRICULTURAL USE



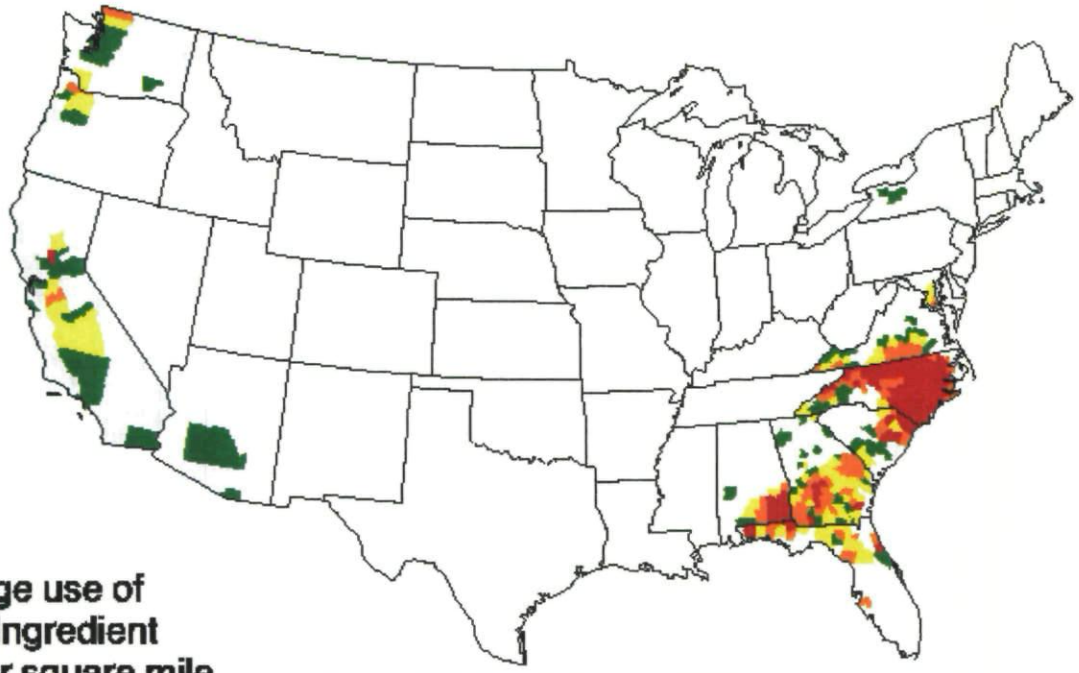
Average use of
Active Ingredient
Pounds per square mile
of county per year

- No Estimated Use
- < 0.051
- 0.051 - 0.280
- 0.281 - 0.939
- 0.940 - 2.869
- >= 2.870

Crops	Total Pounds Applied	Percent National Use
sugarbeets	349, 662	87. 29
	50, 898	12. 71

http://ca.water.usgs.gov/pnsp/pesticide_use_maps_1997/maps/W9012.png

FENAMIPHOS - INSECTICIDES
ESTIMATED ANNUAL AGRICULTURAL USE



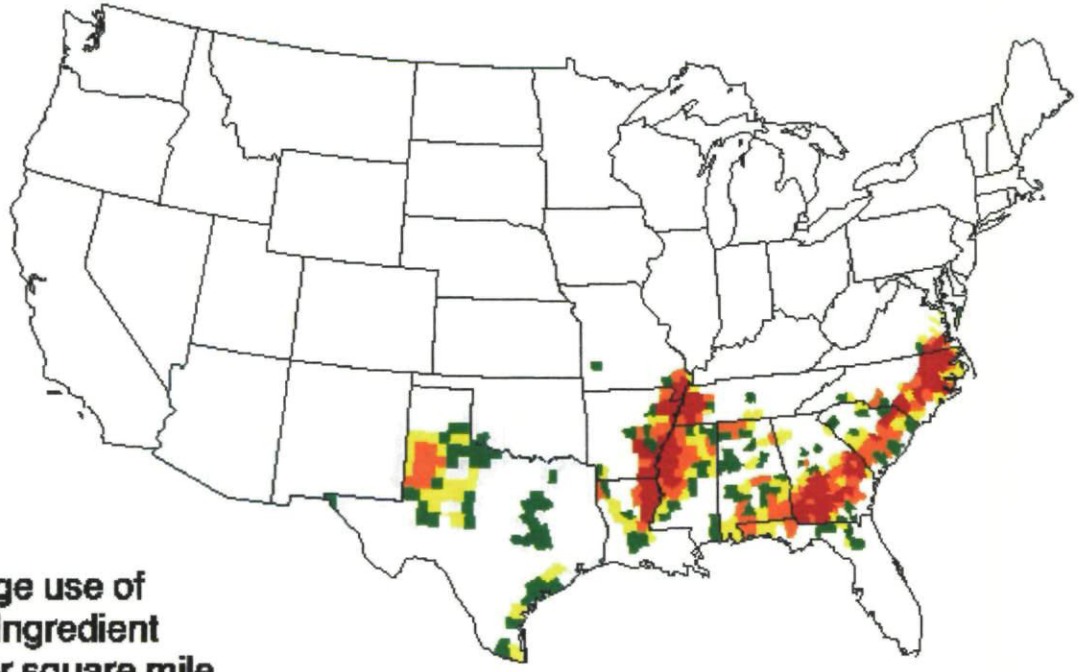
Average use of
Active Ingredient
Pounds per square mile
of county per year

- No Estimated Use
- < 0.003
- 0.003 - 0.118
- 0.119 - 0.407
- 0.408 - 1.489
- >= 1.490

Crops	Total Pounds Applied	Percent National Use
tobacco	376, 840	52. 58
grapes	110, 767	15. 45
peanuts	97, 183	13. 56
citrus	88, 401	12. 33
cotton	20, 399	2. 85
peaches	6, 590	0. 92
raspberries	4, 081	0. 57
cherries	3, 098	0. 43
cabbage	3, 014	0. 42
broccoli	2, 909	0. 41

http://ca.water.usgs.gov/pnsp/pesticide_use_maps_1997/maps/W6025.png

FLUOMETURON - HERBICIDES
ESTIMATED ANNUAL AGRICULTURAL USE



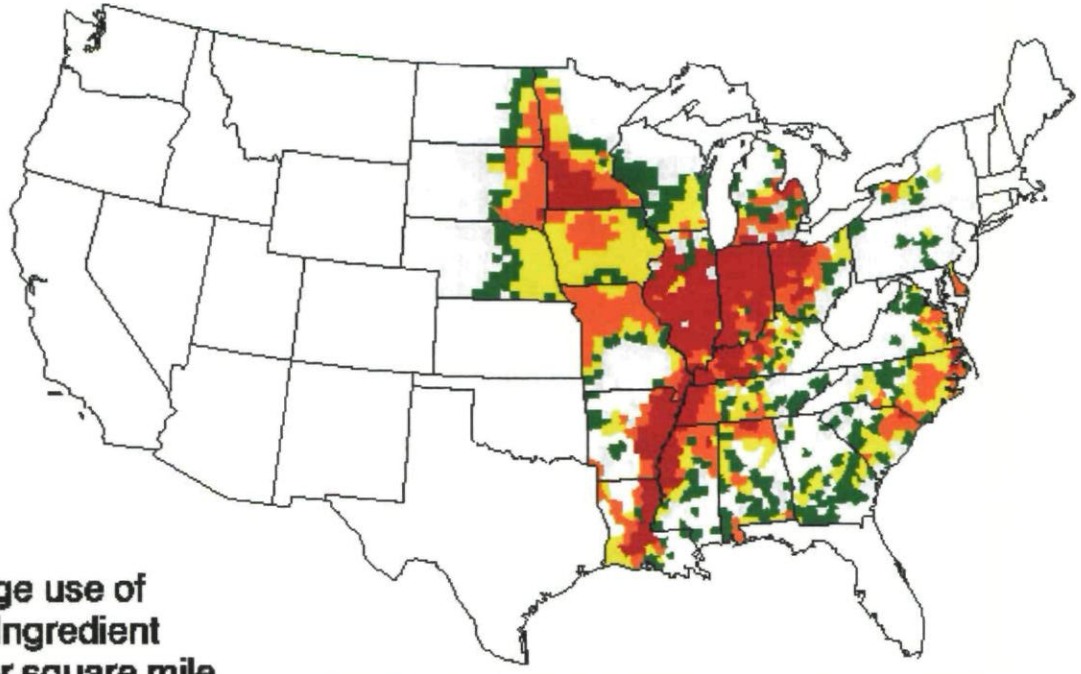
Average use of
Active Ingredient
Pounds per square mile
of county per year

- No Estimated Use
- < 0.506
- 0.506 - 2.779
- 2.780 - 10.095
- 10.096 - 31.711
- >= 31.712

Crops	Total Pounds Applied	Percent National Use
cotton	5, 270, 325	100. 00

http://ca.water.usgs.gov/pnsp/pesticide_use_maps_1997/maps/W1998.png

FOMESAFEN - HERBICIDES
ESTIMATED ANNUAL AGRICULTURAL USE



Average use of
Active Ingredient
Pounds per square mile
of county per year

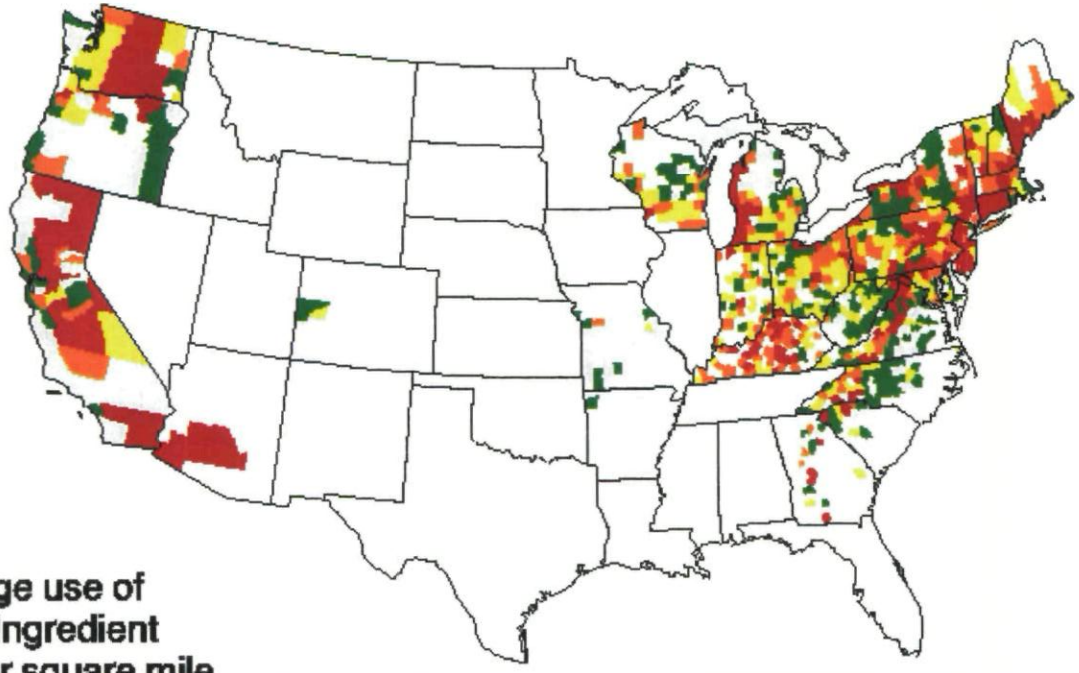
- No Estimated Use
- < 0.060
- 0.060 - 0.239
- 0.240 - 0.684
- 0.685 - 2.220
- >= 2.221

Crops	Total Pounds Applied	Percent National Use
soybeans	1,076,687	98.02
dry beans	17,390	1.58
green beans	4,307	0.39

http://ca.water.usgs.gov/pnsp/pesticide_use_maps_1997/maps/W4010.png

FORMETANATE HCL - INSECTICIDES

ESTIMATED ANNUAL AGRICULTURAL USE



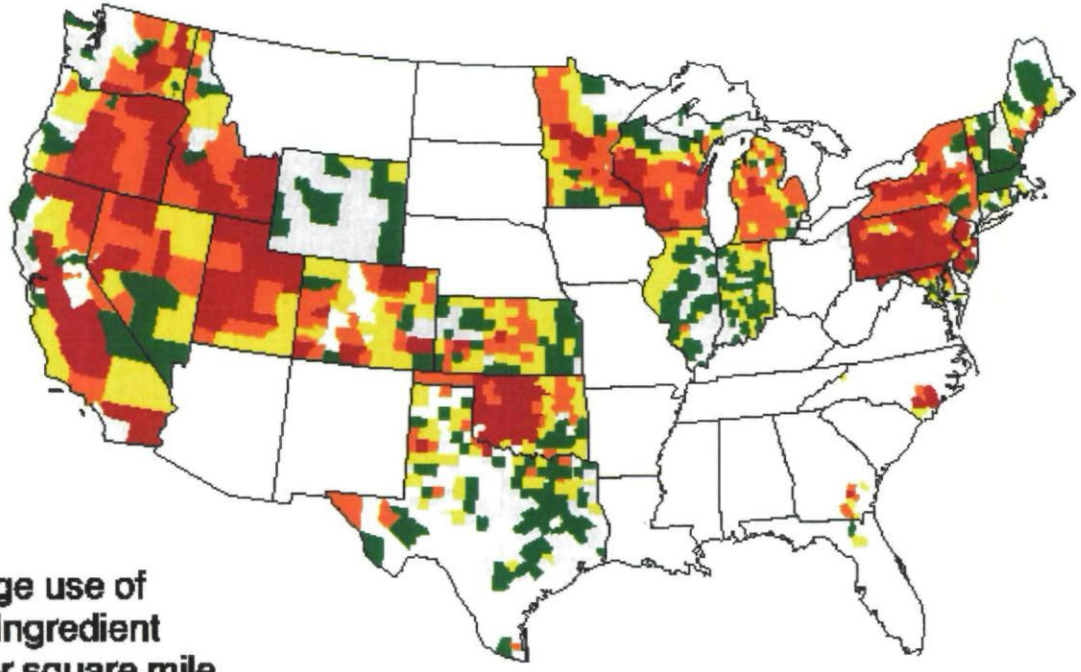
Average use of
Active Ingredient
Pounds per square mile
of county per year

- No Estimated Use
- < 0.001
- 0.001 - 0.001
- 0.002 - 0.007
- 0.008 - 0.026
- >= 0.027

Crops	Total Pounds Applied	Percent National Use
apples	39, 804	29. 23
nectarines	37, 594	27. 61
citrus	32, 749	24. 05
alfalfa	16, 253	11. 94
pears	4, 005	2. 94
plums	3, 418	2. 51
peaches	2, 341	1. 72

http://ca.water.usgs.gov/pnsp/pesticide_use_maps_1997/maps/W6071.png

HEXAZINONE - HERBICIDES
ESTIMATED ANNUAL AGRICULTURAL USE



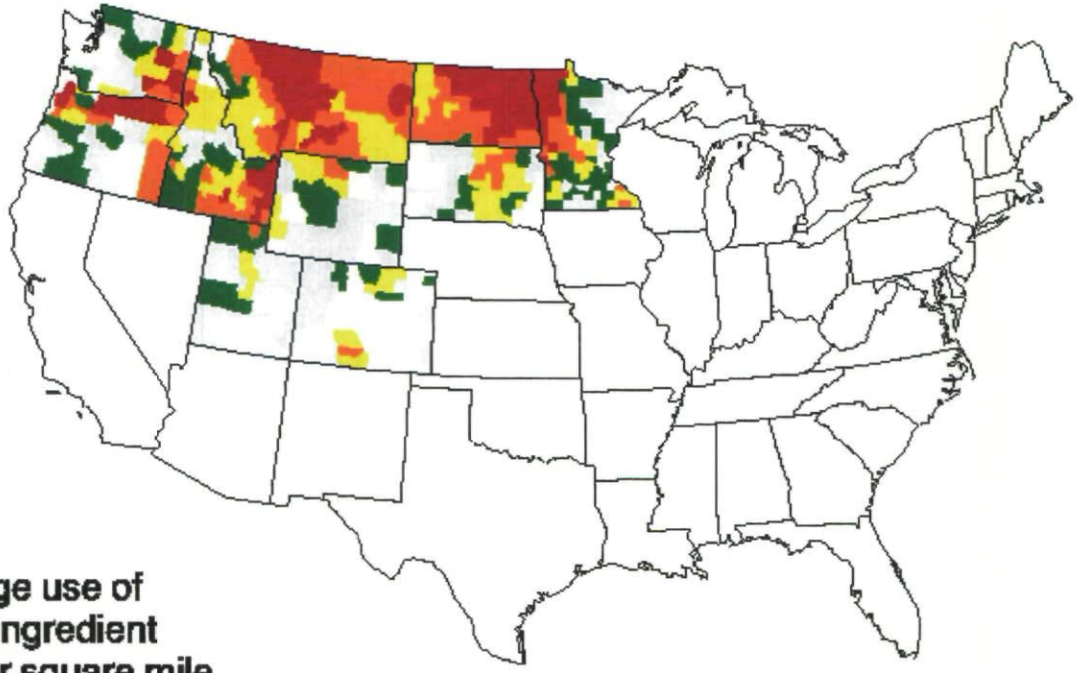
Average use of
Active Ingredient
Pounds per square mile
of county per year

- No Estimated Use
- < 0.017
- 0.017 - 0.038
- 0.039 - 0.094
- 0.095 - 0.260
- >= 0.261

Crops	Total Pounds Applied	Percent National Use
alfalfa	315, 415	98. 47
blueberries	4, 248	1. 33
sugarcane	667	0. 21

http://ca.water.usgs.gov/pnsp/pesticide_use_maps_1997/maps/W2070.png

IMAZAMETHABENZ - HERBICIDES
ESTIMATED ANNUAL AGRICULTURAL USE



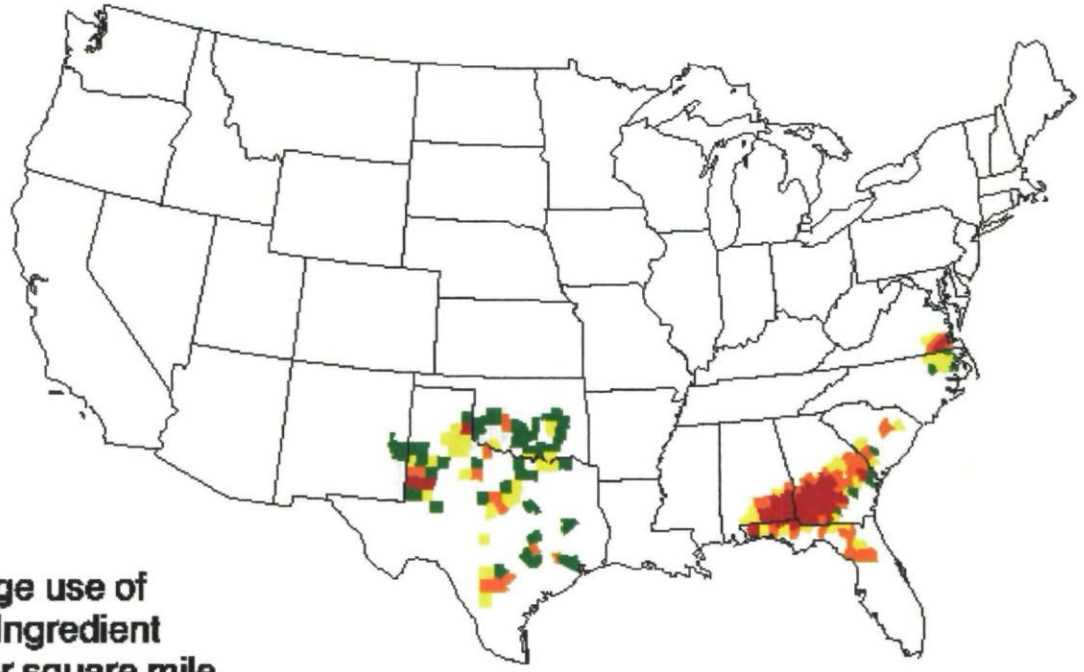
Average use of
Active Ingredient
Pounds per square mile
of county per year

- No Estimated Use
- < 0.007
- 0.007 - 0.030
- 0.031 - 0.114
- 0.115 - 0.369
- >= 0.370

Crops	Total Pounds Applied	Percent National Use
wheat	255, 366	55. 71
barley	151, 010	32. 94
sunflowers	52, 032	11. 35

http://ca.water.usgs.gov/pnsp/pesticide_use_maps_1997/maps/W7001.png

IMAZAPIC - HERBICIDES
ESTIMATED ANNUAL AGRICULTURAL USE



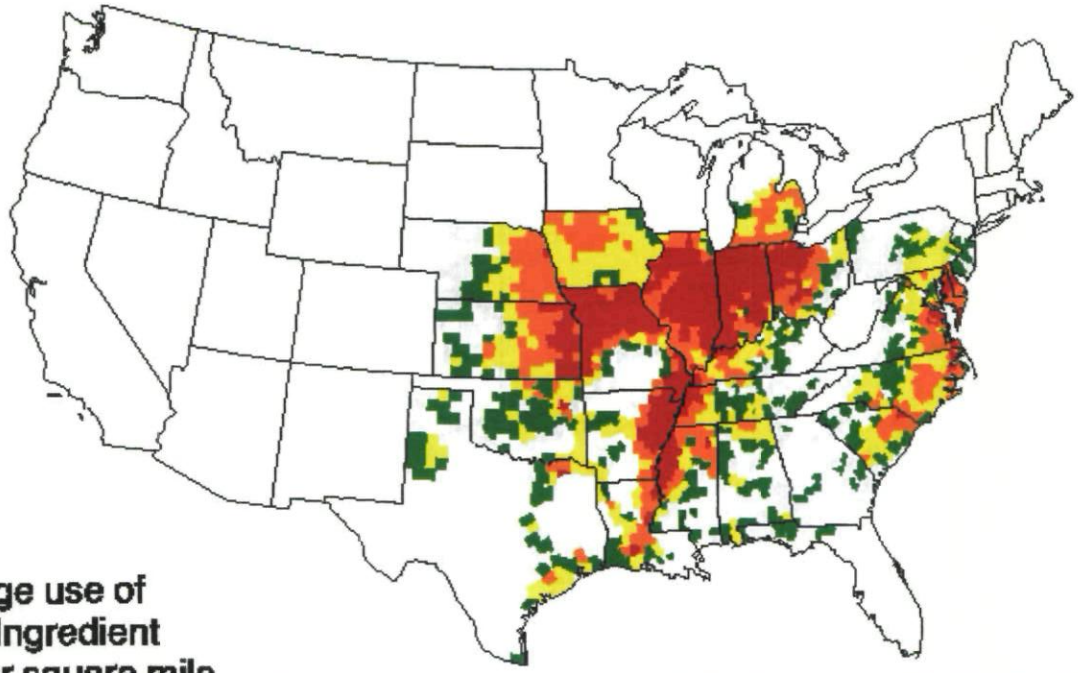
Average use of
Active Ingredient
Pounds per square mile
of county per year

- No Estimated Use
- < 0.004
- 0.004 - 0.013
- 0.014 - 0.039
- 0.040 - 0.193
- >= 0.194

Crops	Total Pounds Applied	Percent National Use
peanuts	18, 873	100. 00

http://ca.water.usgs.gov/pnsp/pesticide_use_maps_1997/maps/W2015.png

IMAZAQUIN - HERBICIDES
ESTIMATED ANNUAL AGRICULTURAL USE



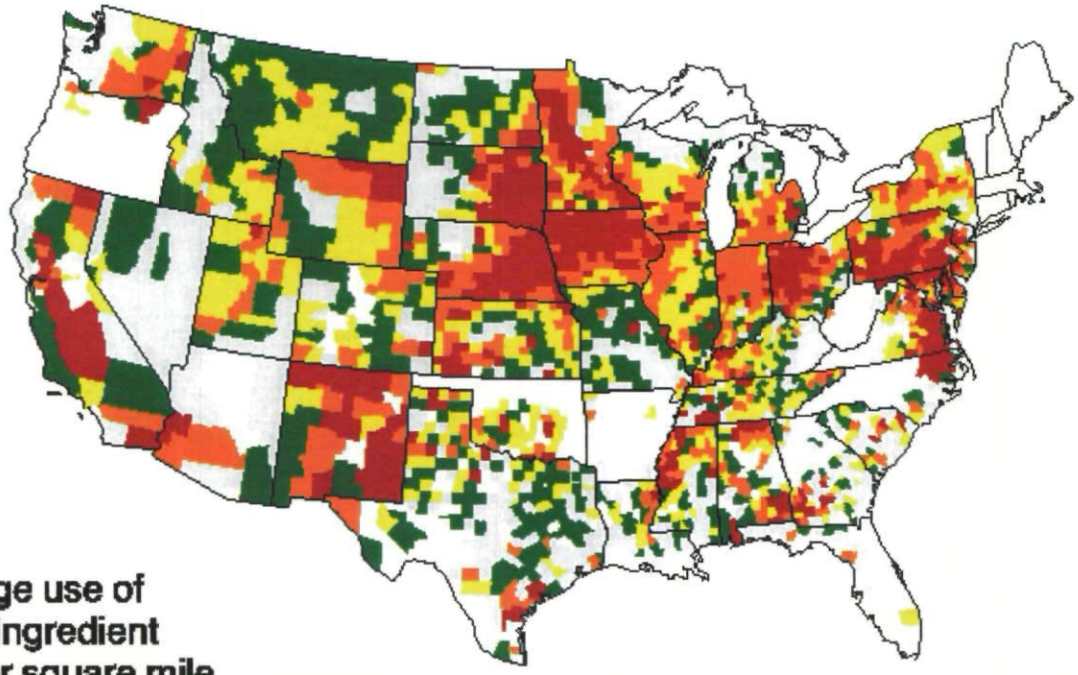
Average use of
Active Ingredient
Pounds per square mile
of county per year

- No Estimated Use
- < 0.032
- 0.032 - 0.162
- 0.163 - 0.516
- 0.517 - 1.736
- >= 1.737

Crops	Total Pounds Applied	Percent National Use
soybeans	756, 129	100. 00

http://ca.water.usgs.gov/pnsp/pesticide_use_maps_1997/maps/W4005.png

IMAZETHAPYR - HERBICIDES
ESTIMATED ANNUAL AGRICULTURAL USE



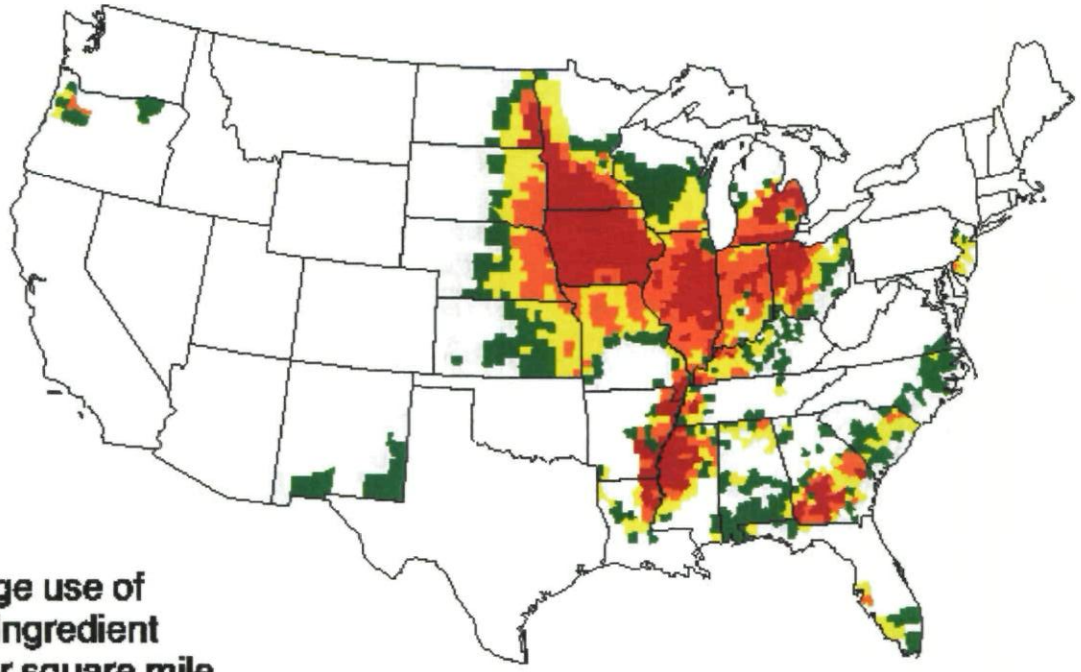
Average use of
Active Ingredient
Pounds per square mile
of county per year

- No Estimated Use
- < 0.002
- 0.002 - 0.005
- 0.006 - 0.015
- 0.016 - 0.040
- >= 0.041

Crops	Total Pounds Applied	Percent National Use
soybeans	1,152,185	92.30
corn	51,833	4.15
alfalfa	27,879	2.23
dry beans	7,416	0.59
peanuts	6,644	0.53
green peas	1,895	0.15
green beans	385	0.03
dry peas	104	0.01
lettuce	15	0.00

http://ca.water.usgs.gov/pnsp/pesticide_use_maps_1997/maps/W9000.png

LACTOFEN - HERBICIDES
ESTIMATED ANNUAL AGRICULTURAL USE



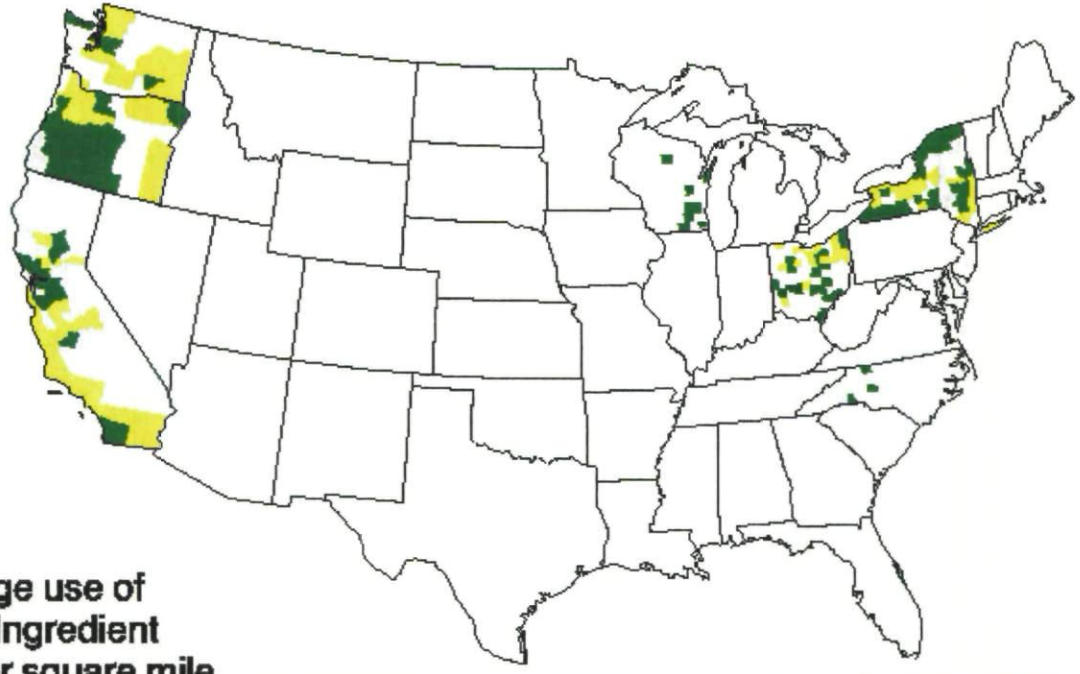
Average use of
Active Ingredient
Pounds per square mile
of county per year

- No Estimated Use
- < 0.018
- 0.018 - 0.098
- 0.099 - 0.352
- 0.353 - 0.746
- >= 0.747

Crops	Total Pounds Applied	Percent National Use
soybeans	298, 820	76. 89
cotton	87, 347	22. 48
tomatoes	1, 254	0. 32
green beans	1, 165	0. 30
green peas	29	0. 01

http://ca.water.usgs.gov/pnsp/pesticide_use_maps_1997/maps/W4009.png

METALDEHYDE - INSECTICIDES
ESTIMATED ANNUAL AGRICULTURAL USE



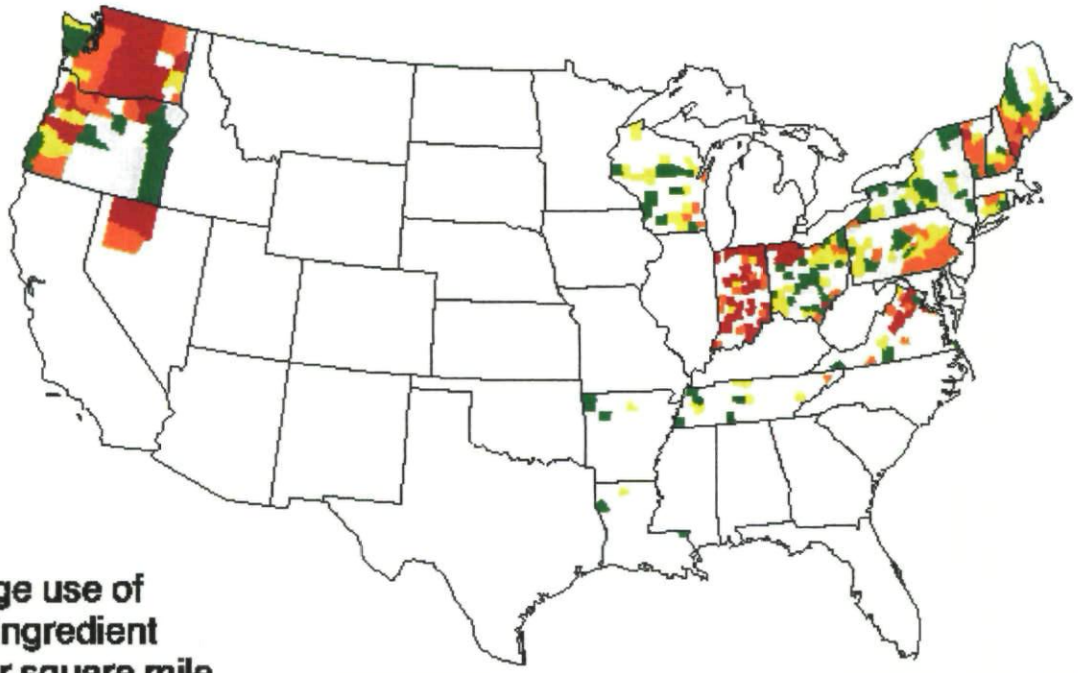
Average use of
Active Ingredient
Pounds per square mile
of county per year

- No Estimated Use
- < 0.001
- 0.001 - 0.004
- >= 0.005

Crops	Total Pounds Applied	Percent National Use
citrus	20, 837	40. 97
artichokes	19, 481	38. 31
strawberries	6, 558	12. 89
avocados	2, 661	5. 23
cauliflower	755	1. 48
blueberries	310	0. 61
raspberries	156	0. 31
hot peppers	55	0. 11
blackberries	30	0. 06
	13	0. 03

http://ca.water.usgs.gov/pnsp/pesticide_use_maps_1997/maps/W6073.png

METHOXYCHLOR - INSECTICIDES
ESTIMATED ANNUAL AGRICULTURAL USE



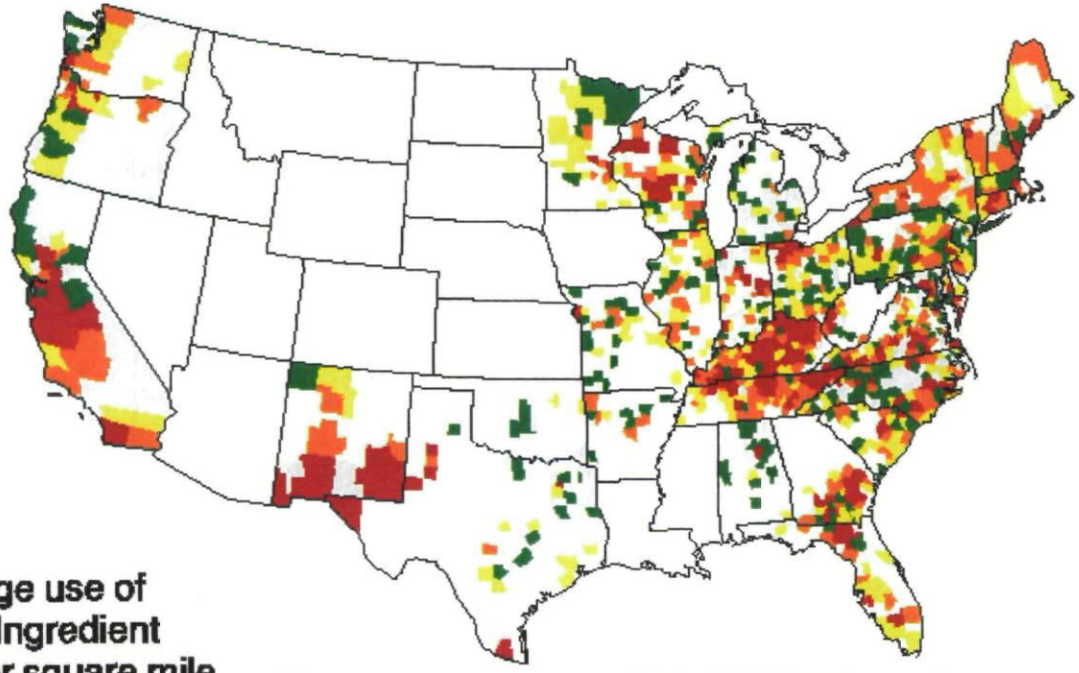
Average use of Active Ingredient Pounds per square mile of county per year

- No Estimated Use
- < 0.001
- 0.001 - 0.001
- 0.002 - 0.005
- 0.006 - 0.020
- >= 0.021

Crops	Total Pounds Applied	Percent National Use
apples	66, 734	88. 24
green peas	5, 181	6. 85
tomatoes	1, 617	2. 14
strawberries	1, 061	1. 40
grapes	686	0. 91
blueberries	228	0. 30
raspberries	119	0. 16
	4	0. 01

http://ca.water.usgs.gov/pnsp/pesticide_use_maps_1997/maps/W6039.png

NAPROPAMIDE - HERBICIDES
ESTIMATED ANNUAL AGRICULTURAL USE



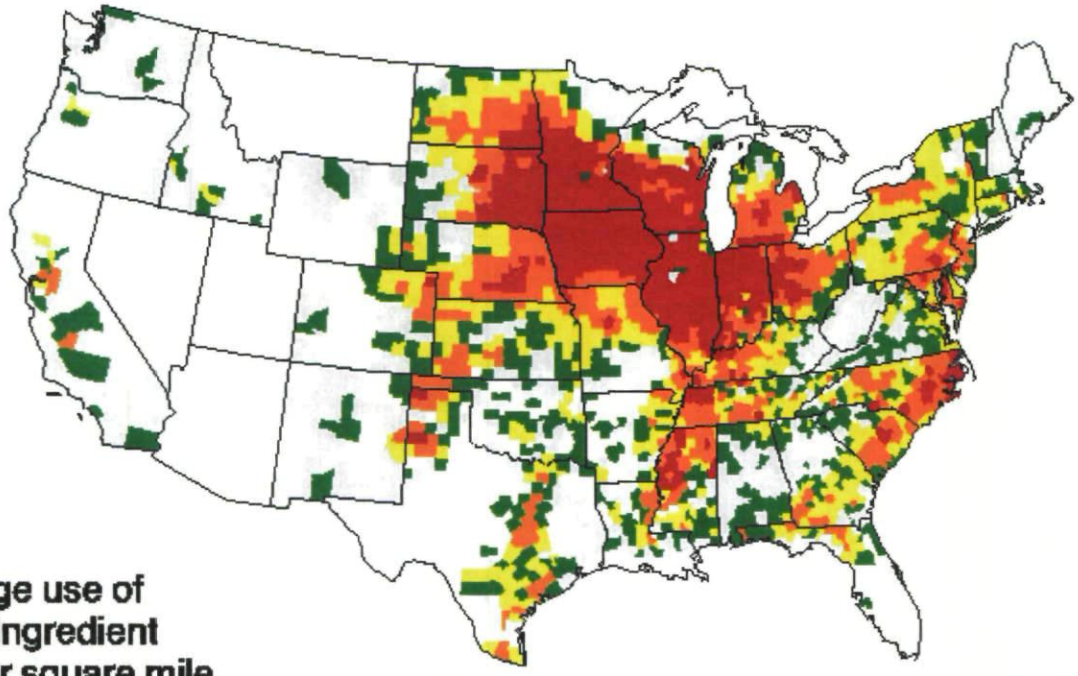
Average use of
Active Ingredient
Pounds per square mile
of county per year

- No Estimated Use
- < 0.001
- 0.001 - 0.005
- 0.006 - 0.021
- 0.022 - 0.145
- >= 0.146

Crops	Total Pounds Applied	Percent National Use
tomatoes	100, 587	24. 09
tobacco	91, 846	22. 00
cranberries	51, 454	12. 32
hot peppers	42, 114	10. 09
strawberries	35, 110	8. 41
almonds	20, 828	4. 99
sweet peppers	20, 484	4. 91
grapes	17, 718	4. 24
citrus	5, 620	1. 35
cabbage	5, 295	1. 27

http://ca.water.usgs.gov/pnsp/pesticide_use_maps_1997/maps/W1900.png

NICOSULFURON - HERBICIDES
ESTIMATED ANNUAL AGRICULTURAL USE



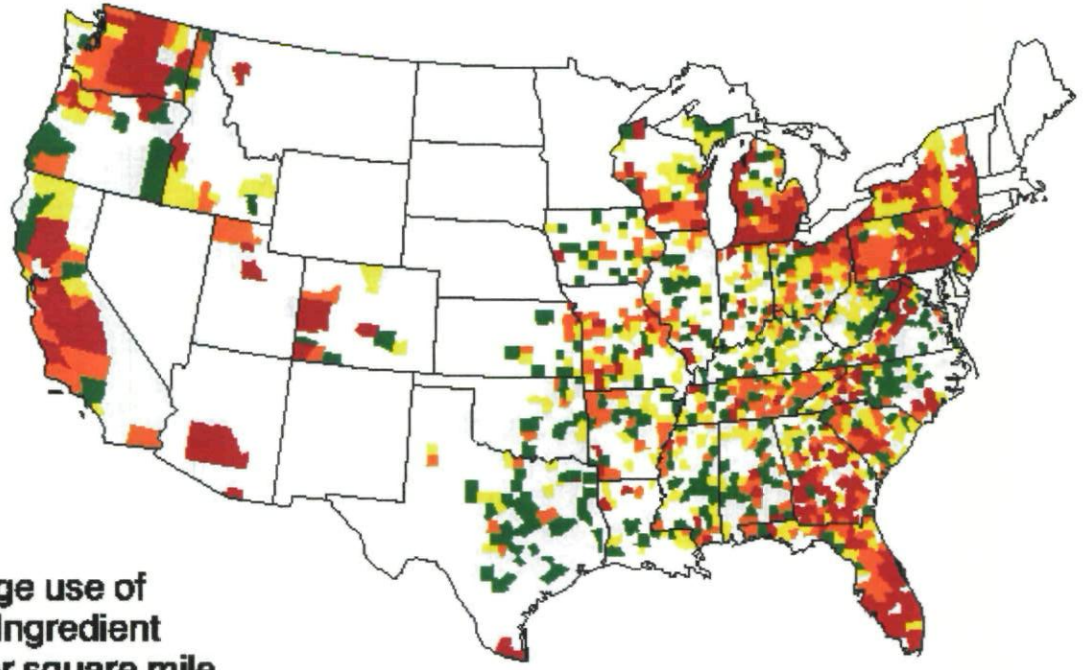
Average use of
Active Ingredient
Pounds per square mile
of county per year

- No Estimated Use
- < 0.004
- 0.004 - 0.018
- 0.019 - 0.061
- 0.062 - 0.222
- >= 0.223

Crops	Total Pounds Applied	Percent National Use
corn	209, 585	99. 22
sweet corn	1, 653	0. 78

http://ca.water.usgs.gov/pnsp/pesticide_use_maps_1997/maps/W7007.png

ORYZALIN - HERBICIDES
ESTIMATED ANNUAL AGRICULTURAL USE



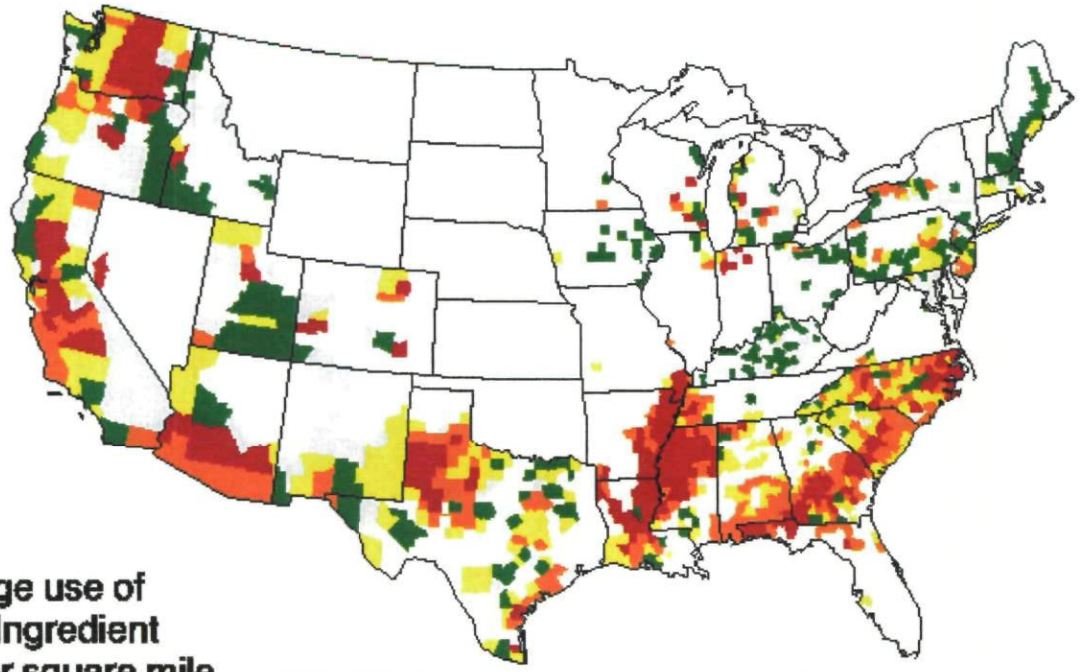
Average use of
Active Ingredient
Pounds per square mile
of county per year

- No Estimated Use
- < 0.001
- 0.001 - 0.003
- 0.004 - 0.009
- 0.010 - 0.038
- >= 0.039

Crops	Total Pounds Applied	Percent National Use
grapes	284, 338	32. 03
almonds	167, 251	18. 84
apples	151, 541	17. 07
pistachios	87, 272	9. 83
citrus	36, 950	4. 16
peaches	23, 950	2. 70
plums	23, 556	2. 65
pecans	22, 192	2. 50
cherries	20, 894	2. 35
walnuts	19, 392	2. 18

http://ca.water.usgs.gov/pnsp/pesticide_use_maps_1997/maps/W1873.png

OXYFLUORFEN - HERBICIDES
ESTIMATED ANNUAL AGRICULTURAL USE



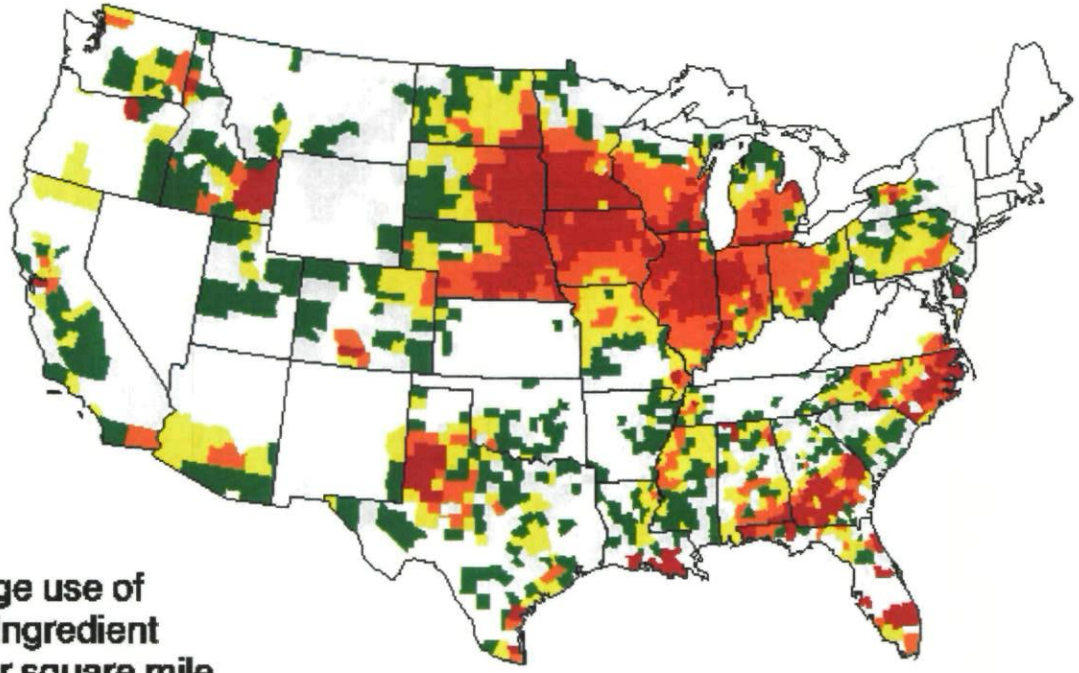
Average use of
Active Ingredient
Pounds per square mile
of county per year

- No Estimated Use
- < 0.001
- 0.001 - 0.002
- 0.003 - 0.016
- 0.017 - 0.089
- >= 0.090

Crops	Total Pounds Applied	Percent National Use
grapes	161, 874	23. 37
cotton	148, 977	21. 51
almonds	95, 130	13. 74
apples	50, 105	7. 23
pistachios	40, 009	5. 78
onions	29, 085	4. 20
citrus	19, 648	2. 84
walnuts	17, 511	2. 53
cherries	17, 001	2. 45
	12, 876	1. 86

http://ca.water.usgs.gov/pnsp/pesticide_use_maps_1997/maps/W4000.png

PHORATE - INSECTICIDES
ESTIMATED ANNUAL AGRICULTURAL USE



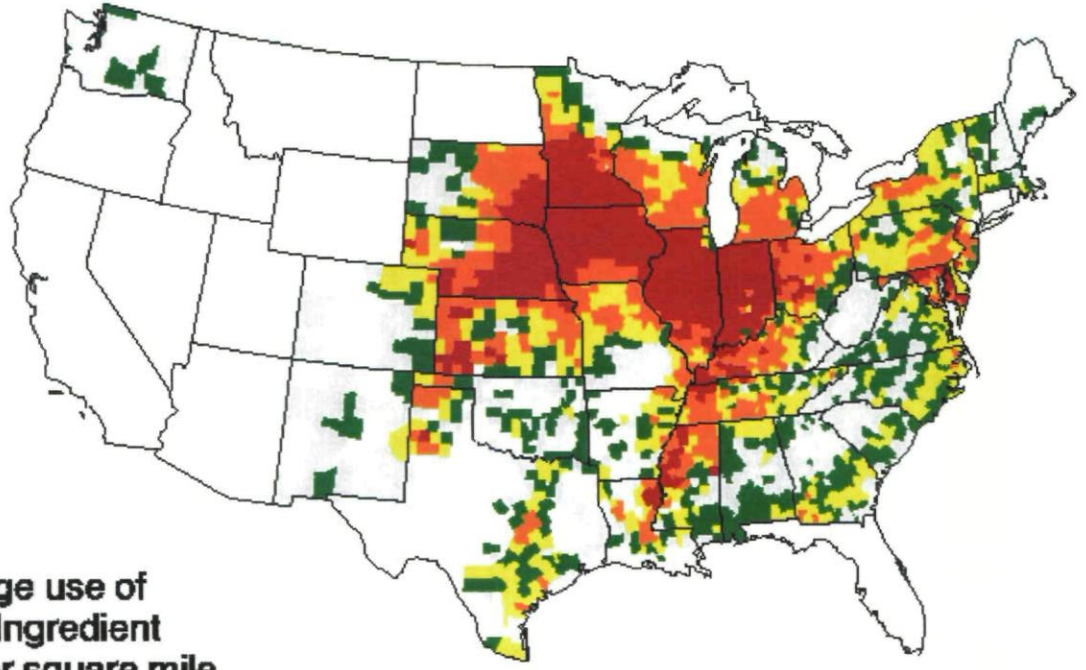
Average use of
Active Ingredient
Pounds per square mile
of county per year

- No Estimated Use
- < 0.027
- 0.027 - 0.191
- 0.192 - 0.784
- 0.785 - 2.141
- >= 2.142

Crops	Total Pounds Applied	Percent National Use
corn	1, 169, 464	37. 50
potatoes	716, 092	22. 96
cotton	580, 425	18. 61
peanuts	273, 580	8. 77
sugarcane	182, 546	5. 85
wheat	51, 421	1. 65
sugarbeets	49, 390	1. 58
sweet corn	43, 946	1. 41
dry beans	37, 964	1. 22
hops	9, 558	0. 31

http://ca.water.usgs.gov/pnsp/pesticide_use_maps_1997/maps/W6050.png

PRIMISULFURON - HERBICIDES
ESTIMATED ANNUAL AGRICULTURAL USE



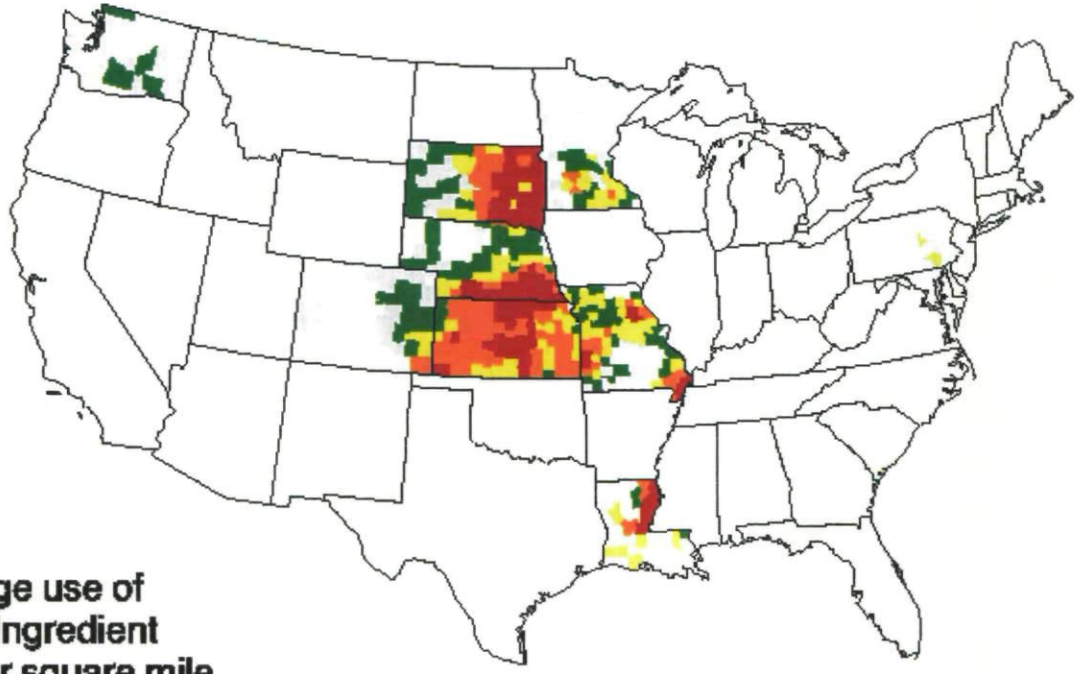
Average use of
Active Ingredient
Pounds per square mile
of county per year

- No Estimated Use
- < 0.003
- 0.003 - 0.013
- 0.014 - 0.047
- 0.048 - 0.170
- >= 0.171

Crops	Total Pounds Applied	Percent National Use
corn	132, 889	100. 00

http://ca.water.usgs.gov/pnsp/pesticide_use_maps_1997/maps/W7008.png

PROPACHLOR - HERBICIDES
ESTIMATED ANNUAL AGRICULTURAL USE



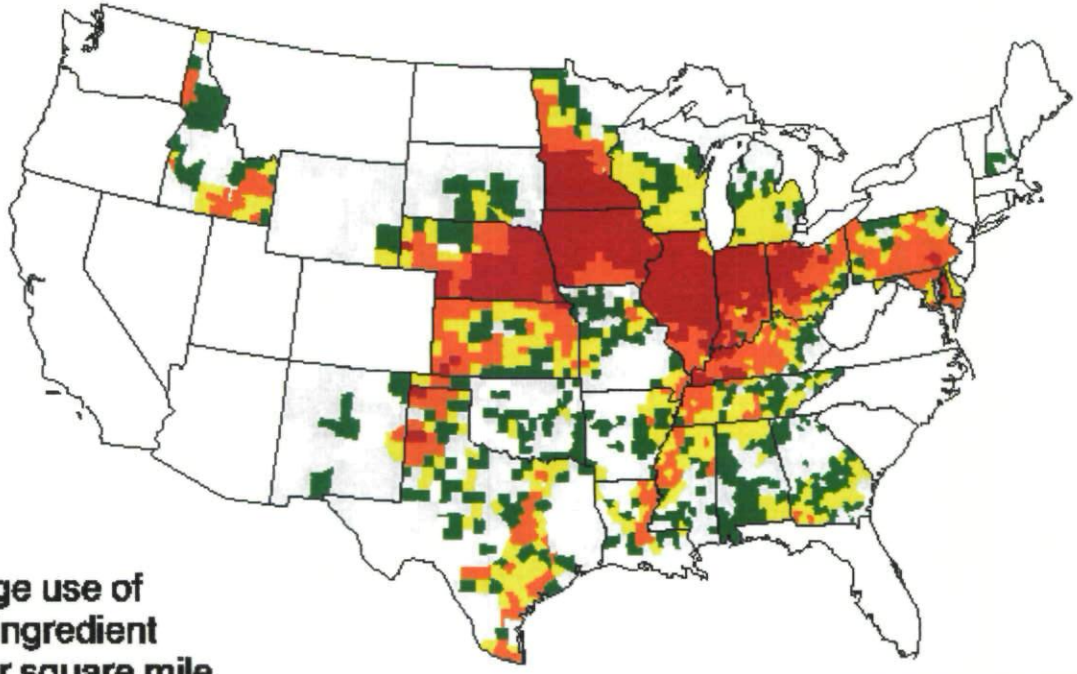
Average use of
Active Ingredient
Pounds per square mile
of county per year

- No Estimated Use
- < 0.066
- 0.066 - 0.301
- 0.302 - 1.379
- 1.380 - 3.626
- >= 3.627

Crops	Total Pounds Applied	Percent National Use
sorghum	617, 770	69. 10
corn	262, 864	29. 40
sweet corn	11, 920	1. 33
green peas	1, 508	0. 17

http://ca.water.usgs.gov/pnsp/pesticide_use_maps_1997/maps/W1191.png

PROSULFURON - HERBICIDES
ESTIMATED ANNUAL AGRICULTURAL USE



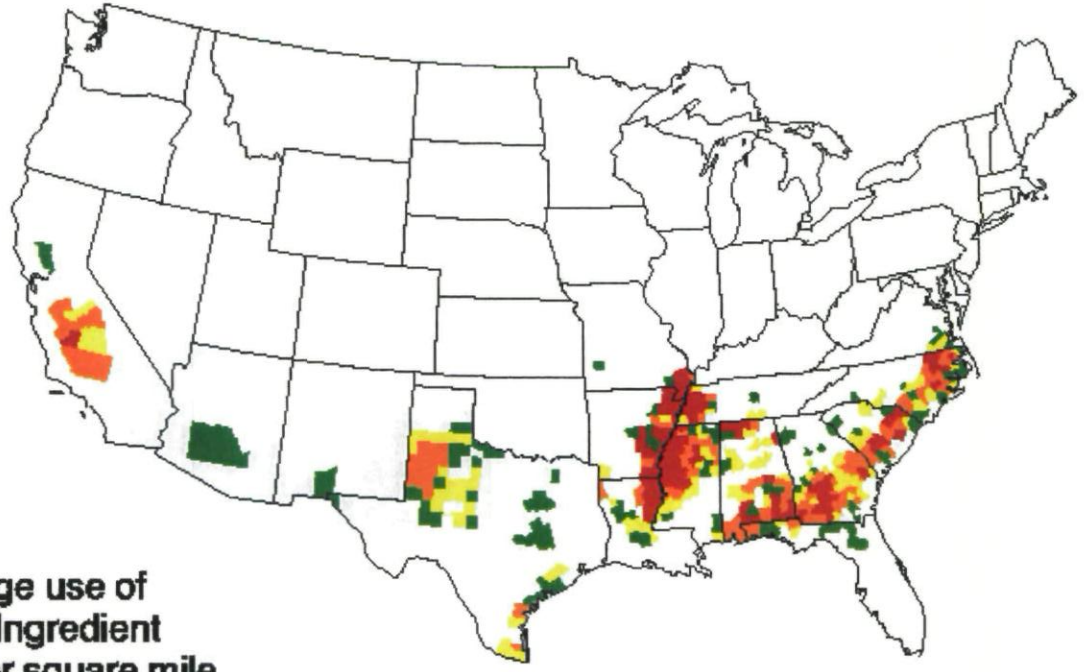
Average use of
Active Ingredient
Pounds per square mile
of county per year

- No Estimated Use
- < 0.001
- 0.001 - 0.005
- 0.006 - 0.020
- 0.021 - 0.125
- >= 0.126

Crops	Total Pounds Applied	Percent National Use
corn	65, 275	89. 54
sorghum	6, 536	8. 97
wheat	1, 091	1. 50

http://ca.water.usgs.gov/pnsp/pesticide_use_maps_1997/maps/W2017.png

PYRITHIOBAC - HERBICIDES
ESTIMATED ANNUAL AGRICULTURAL USE



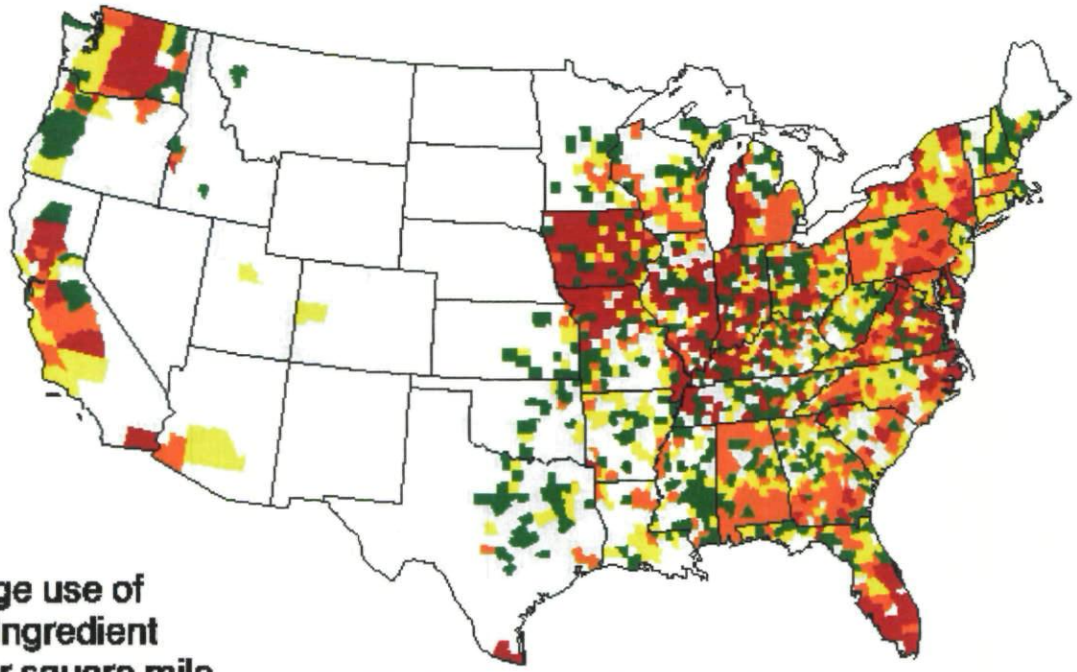
Average use of
Active Ingredient
Pounds per square mile
of county per year

- No Estimated Use
- < 0.028
- 0.028 - 0.105
- 0.106 - 0.324
- 0.325 - 0.935
- >= 0.936

Crops	Total Pounds Applied	Percent National Use
cotton	206, 570	100. 00

http://ca.water.usgs.gov/pnsp/pesticide_use_maps_1997/maps/W2020.png

SIMAZINE - HERBICIDES
ESTIMATED ANNUAL AGRICULTURAL USE



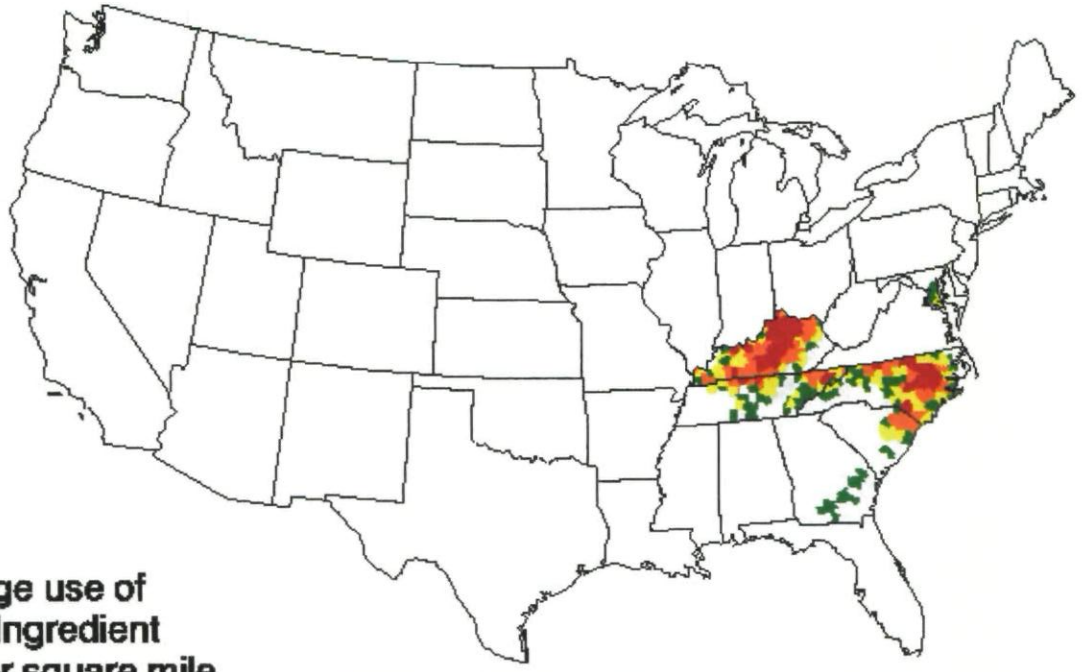
Average use of
Active Ingredient
Pounds per square mile
of county per year

- No Estimated Use
- < 0.005
- 0.005 - 0.017
- 0.018 - 0.068
- 0.069 - 0.676
- >= 0.677

Crops	Total Pounds Applied	Percent National Use
corn	2,090,508	41.48
citrus	1,873,573	37.17
apples	362,195	7.19
grapes	360,002	7.14
almonds	49,254	0.98
pecans	45,634	0.91
peaches	39,887	0.79
walnuts	37,011	0.73
cherries	34,200	0.68
olives	24,592	0.49

http://ca.water.usgs.gov/pnsp/pesticide_use_maps_1997/maps/W1981.png

SULFENTRAZONE - HERBICIDES
ESTIMATED ANNUAL AGRICULTURAL USE



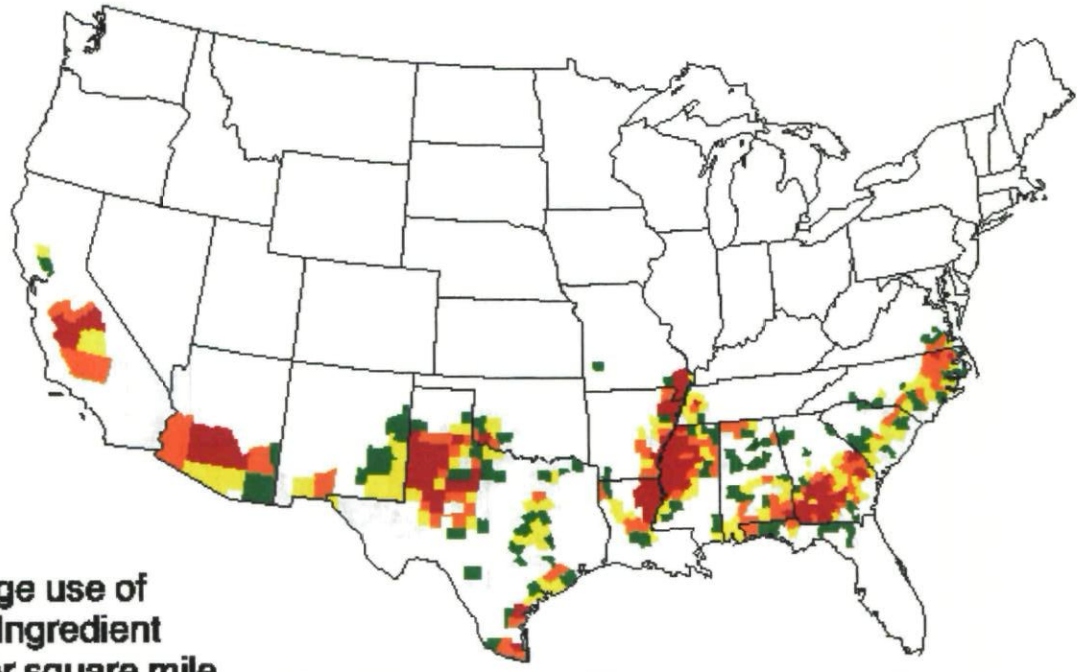
Average use of
Active Ingredient
Pounds per square mile
of county per year

- No Estimated Use
- < 0.038
- 0.038 - 0.136
- 0.137 - 0.484
- 0.485 - 0.956
- >= 0.957

Crops	Total Pounds Applied	Percent National Use
tobacco	69, 003	100. 00

http://ca.water.usgs.gov/pnsp/pesticide_use_maps_1997/maps/W2022.png

THIDIAZURON - OTHER PESTICIDES
ESTIMATED ANNUAL AGRICULTURAL USE



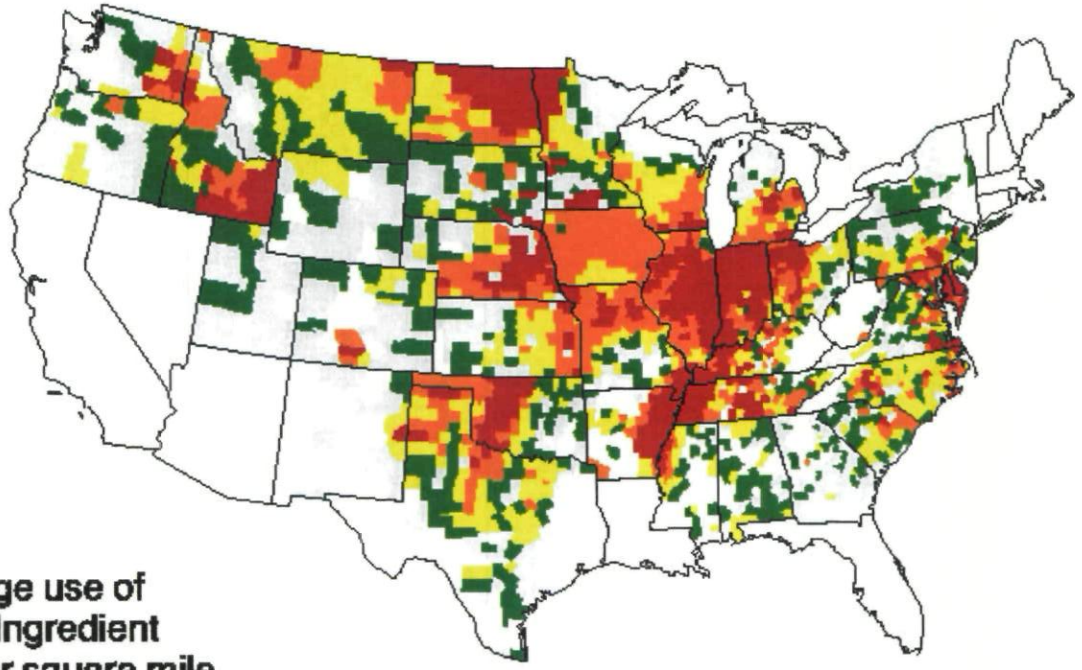
Average use of
Active Ingredient
Pounds per square mile
of county per year

- No Estimated Use
- < 0.050
- 0.050 - 0.154
- 0.155 - 0.440
- 0.441 - 0.995
- >= 0.996

Crops	Total Pounds Applied	Percent National Use
cotton	324, 988	100. 00

http://ca.water.usgs.gov/pnsp/pesticide_use_maps_1997/maps/W8006.png

THIFENSULFURON - HERBICIDES
ESTIMATED ANNUAL AGRICULTURAL USE



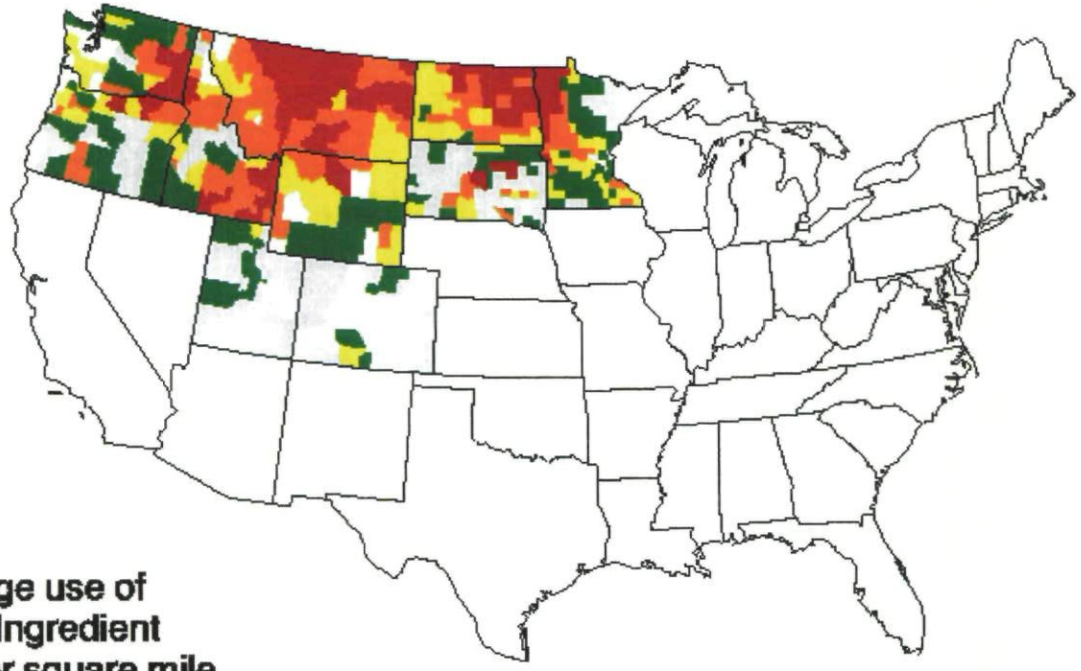
Average use of
Active Ingredient
Pounds per square mile
of county per year

- No Estimated Use
- < 0.001
- 0.001 - 0.002
- 0.003 - 0.012
- 0.013 - 0.031
- >= 0.032

Crops	Total Pounds Applied	Percent National Use
wheat	72, 243	68. 84
soybeans	16, 056	15. 30
barley	9, 419	8. 98
corn	6, 462	6. 16
oats	769	0. 73

http://ca.water.usgs.gov/pnsp/pesticide_use_maps_1997/maps/W4004.png

TRIALLATE - HERBICIDES
ESTIMATED ANNUAL AGRICULTURAL USE



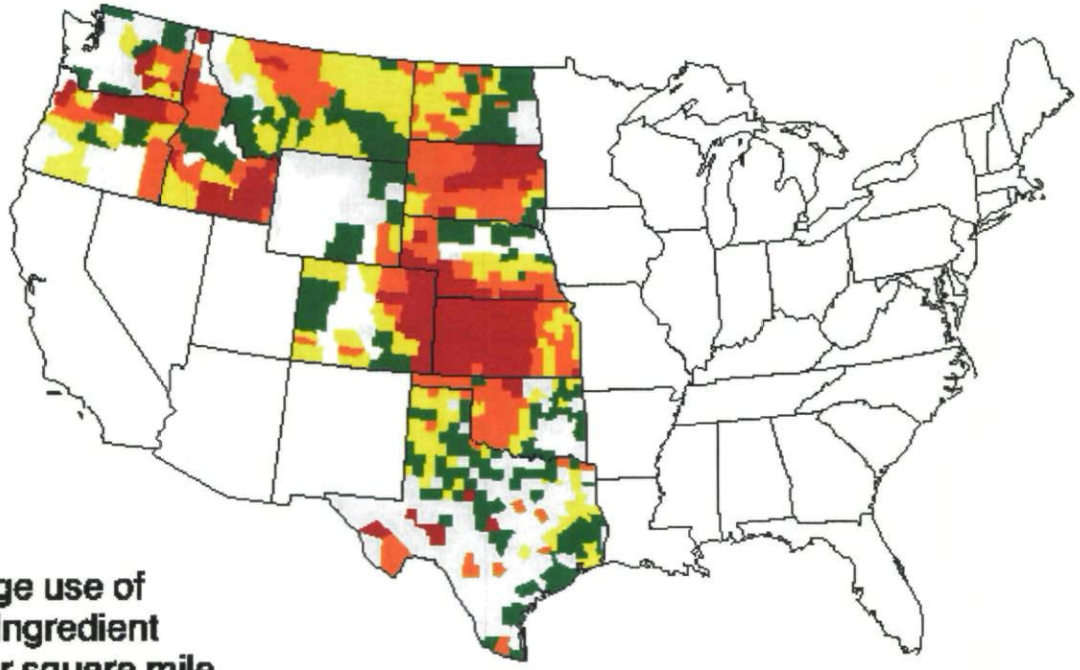
Average use of
Active Ingredient
Pounds per square mile
of county per year

- No Estimated Use
- < 0.017
- 0.017 - 0.064
- 0.065 - 0.339
- 0.340 - 1.338
- >= 1.339

Crops	Total Pounds Applied	Percent National Use
wheat	1,307,677	62.10
barley	772,757	36.70
green peas	25,399	1.21

http://ca.water.usgs.gov/pnsp/pesticide_use_maps_1997/maps/W1790.png

TRIASULFURON - HERBICIDES
ESTIMATED ANNUAL AGRICULTURAL USE



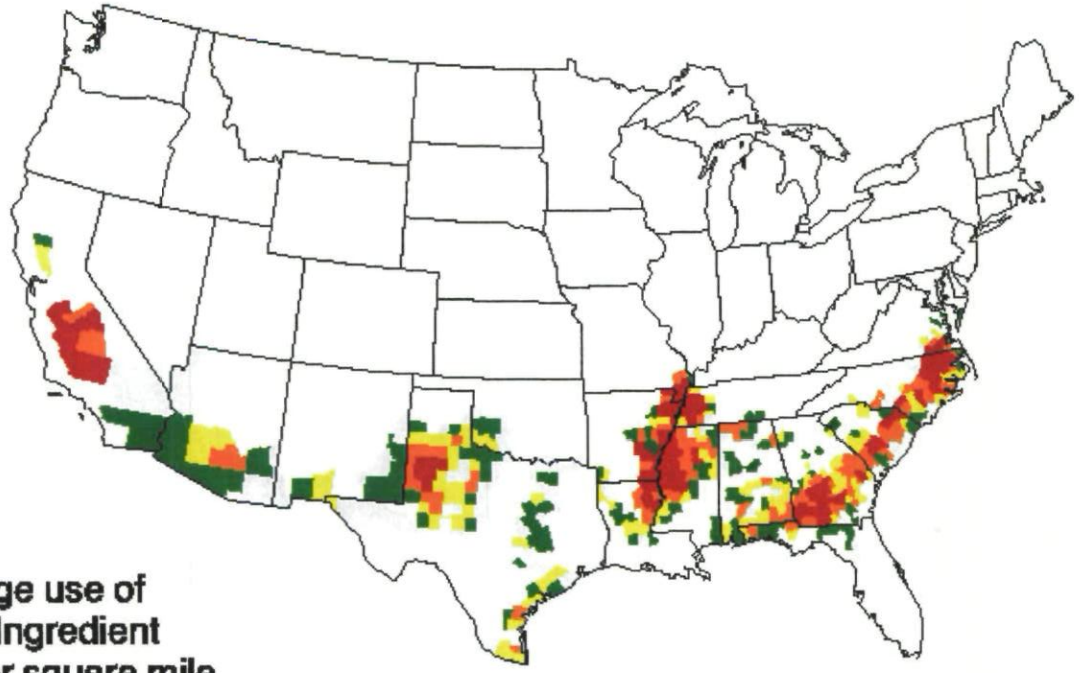
Average use of
Active Ingredient
Pounds per square mile
of county per year

- No Estimated Use
- < 0.000
- 0.000 - 0.001
- 0.002 - 0.009
- 0.010 - 0.056
- >= 0.057

Crops	Total Pounds Applied	Percent National Use
wheat	44, 543	78. 31
pasture	9, 859	17. 33
barley	1, 202	2. 11
fallowland	861	1. 51
other hay	416	0. 73

http://ca.water.usgs.gov/pnsp/pesticide_use_maps_1997/maps/W7011.png

TRIBUFOS - OTHER PESTICIDES
ESTIMATED ANNUAL AGRICULTURAL USE



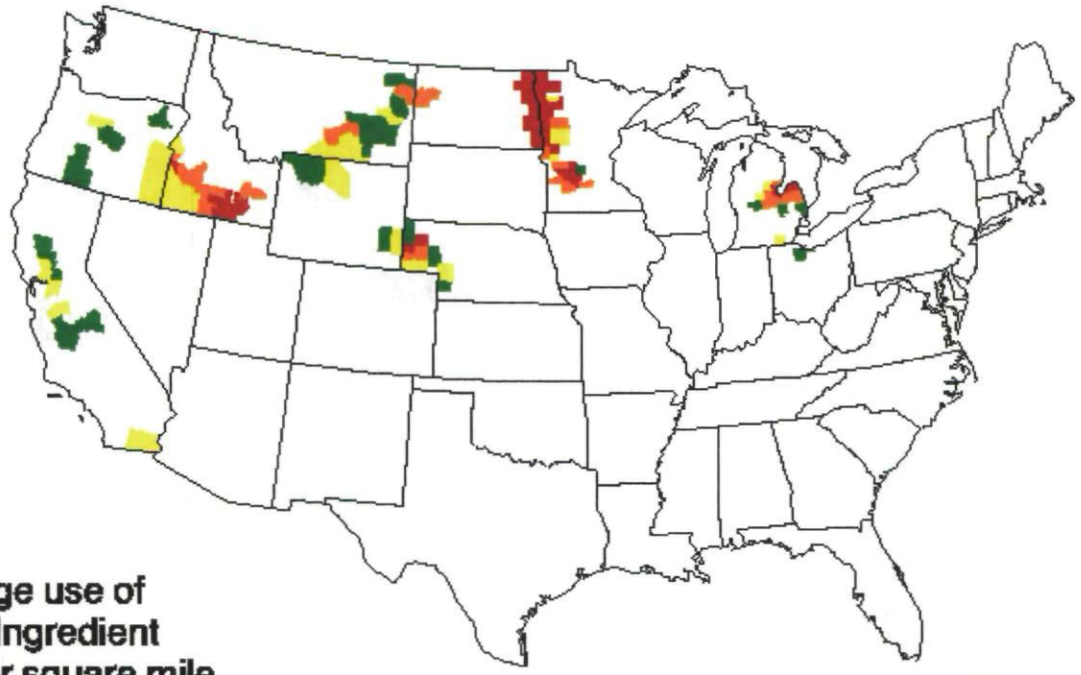
Average use of
Active Ingredient
Pounds per square mile
of county per year

- No Estimated Use
- < 0.732
- 0.732 - 2.549
- 2.550 - 7.726
- 7.727 - 23.043
- >= 23.044

Crops	Total Pounds Applied	Percent National Use
cotton	4,891,001	100.00

http://ca.water.usgs.gov/pnsp/pesticide_use_maps_1997/maps/W8009.png

TRIFLUSULFURON - HERBICIDES
ESTIMATED ANNUAL AGRICULTURAL USE



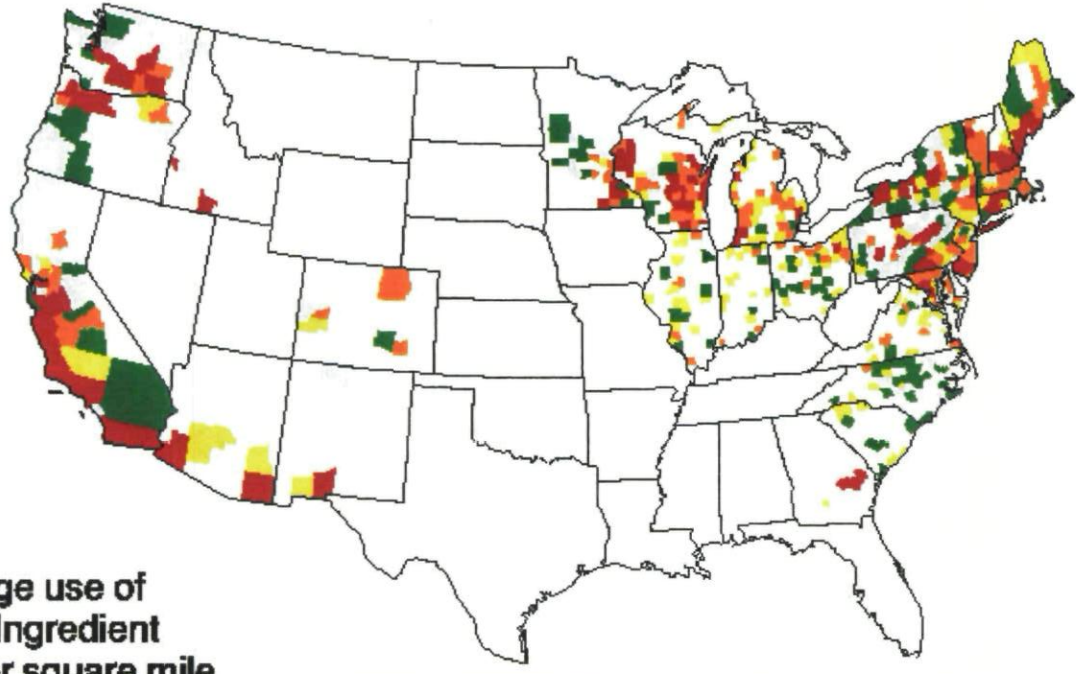
Average use of
Active Ingredient
Pounds per square mile
of county per year

- No Estimated Use
- < 0.005
- 0.005 - 0.016
- 0.017 - 0.045
- 0.046 - 0.252
- >= 0.253

Crops	Total Pounds Applied	Percent National Use
sugarbeets	22, 761	100. 00

http://ca.water.usgs.gov/pnsp/pesticide_use_maps_1997/maps/W2026.png

VINCLOZOLIN - FUNGICIDES
ESTIMATED ANNUAL AGRICULTURAL USE



Average use of
Active Ingredient
Pounds per square mile
of county per year

- No Estimated Use
- < 0.001
- 0.001 - 0.002
- 0.003 - 0.007
- 0.008 - 0.027
- >= 0.028

Crops	Total Pounds Applied	Percent National Use
lettuce	48, 140	41. 32
green beans	26, 185	22. 48
strawberries	23, 306	20. 00
raspberries	7, 278	6. 25
onions	5, 012	4. 30
peaches	2, 859	2. 45
nectarines	1, 206	1. 04
apricots	882	0. 76
cherries	779	0. 67
blackberries	578	0. 50

http://ca.water.usgs.gov/pnsp/pesticide_use_maps_1997/maps/W5013.png

3 米国EPAによる農薬の潜在的発がん性の評価

Chemicals Evaluated for Carcinogenic Potential

Science Information Management Branch
Health Effects Division
Office of Pesticide Programs
U.S. Environmental Protection Agency

BACKGROUND

What is this list?

The List of Chemicals Evaluated for Carcinogenic Potential provides an overview of the compounds evaluated for carcinogenicity by the Health Effects Division of the Office of Pesticide Programs. It also includes evaluations by other groups that HED may use until HED completes its evaluation. This list includes pesticide active ingredients that have been submitted to EPA for registration, reregistration, or special review. The registration of some of these pesticides has been canceled.

As new information becomes available, the list may become out-of-date. Therefore, it should not be used as the sole reference regarding the carcinogenic potential for a pesticide. EPA intends to update the list as new evaluations or re-evaluations are completed.

How does EPA review pesticides for potential carcinogenicity?

The Health Effects Division of the Office of Pesticide Programs performs an independent review of studies conducted in mice and rats to evaluate the carcinogenic potential of pesticides. The results of the independent review are peer-reviewed by the Cancer Assessment Review Committee. This committee recommends a cancer classification. The classification will determine how the Agency regulates the pesticide and will include methods for quantification of human risk. In some cases, EPA also requests review by the FIFRA Scientific Advisory Panel. For some chemicals, other groups of EPA scientists have provided the assessment, and OPP uses these assessments.

What factors does EPA consider in its review of cancer risk?

When assessing possible cancer risk posed by a pesticide, EPA considers how strongly carcinogenic the chemical is (its potency) and the potential for human exposure. The pesticides are evaluated not only to determine if they cause cancer in laboratory animals, but also as to their potential to cause human cancer. For any pesticide classified as a potential carcinogen, the risk would depend on the extent to which a person might be exposed (how much time and to what quantity of the pesticide). The factors considered include short-term studies, long-term cancer studies, mutagenicity studies, and structure activity concerns. (The term "weight-of-the-evidence" is used in referring to such a review. This means that the

recommendation is not based on the results of one study, but on the results of all studies that are available.)

When does EPA review pesticides for potential carcinogenicity?

EPA reviews studies submitted when a pesticide is proposed for registration. Studies are required in two species (mice and rats) and two sexes (males and females). These studies are required for all pesticides used on food and some non-food pesticides that could lead to long-term exposures in humans. These studies may be reviewed again when a pesticide undergoes reregistration and the cancer classification may be re-evaluated, particularly if new studies have been submitted.

Why are there several different cancer classifications in the list?

EPA's guidelines for evaluating the potential carcinogenicity of chemicals have been updated over the years to reflect increased understanding of ways chemicals may cause cancer. The current guidelines call for greater emphasis on characterization discussions for hazard, dose-response assessment, exposure assessment, and risk characterization, as well as the use of mode of action in the assessment of potential carcinogenesis. EPA does not have the resources to re-evaluate every chemical to determine how it would be described under new guidelines, and there is no reason to re-evaluate chemicals unless there is some new information that could change the basic understanding of that chemical.

How have the guidelines changed?

EPA issued its first set of principles to guide evaluation of human cancer potential in1976. In 1986, EPA issued updated guidance, which included a letter system (A-E) for designating degree of carcinogenic potential. In the 1986 guidelines, hazard identification and the weight-of-evidence process focused on tumor findings. The human carcinogenic potential of agents was characterized by a six-category alphanumeric classification system (A, B1, B2, C, and D).

In 1996, EPA released "Proposed Guidelines for Carcinogen Risk Assessment," which used descriptive phrases rather than the alphanumeric classification to classify carcinogenic potential. In the 1996 classification structure, increased emphasis was placed on discussing characterization of hazard, dose-response, and exposure assessments. The hazard and weight of evidence process embraced an analysis of all relevant biological information and emphasized understanding the agent's mode of action in producing tumors to reduce the uncertainty in describing the likelihood of harm.

By 1999, the science related to carcinogens had advanced significantly. EPA issued draft guidelines that continued the greater emphasis on characterization discussions for hazard, dose-response assessment, exposure assessment, risk characterization and the use of mode of action in the assessment of potential carcinogenesis. In addition, the guidelines included consideration of risk to children, as well as addressing other issues such as nuances related to the amount and

adequacy of data on a chemical.

How do the different designations compare?

The short answer is that they cannot be directly compared. Each system's designations refer to the reviews and criteria it contains. A substance that is, for example, a "C" in the 1986 system may not be directly translatable to any particular category in the later systems. The designation for any substance must be considered in the context of the system under which it was reviewed.

A list of the descriptors from the various classification systems and their definitions follows.

Carcinogenicity Classification of Pesticides: Derivation and Definition of Terms

CLASSIFICATION–1999 Draft

The most recent EPA guidance for carcinogenicity classification is presented in the July 1999 "Review Draft of the Guidelines for Carcinogen Risk Assessment." The terms used in this document are listed and described as follows:

CARCINOGENIC TO HUMANS. This descriptor is appropriate when there is convincing epidemiologic evidence demonstrating causality between human exposure and cancer. This descriptor is also appropriate when there is an absence of conclusive epidemiologic evidence to clearly establish a cause and effect relationship between human exposure and cancer, but there is compelling evidence of carcinogenicity in animals and mechanistic information in animals and humans demonstrating similar mode(s) of carcinogenic action. It is used when all of the following conditions are met:

- There is evidence in a human population(s) of association of exposure to the agent with cancer, but not enough to show a causal association, and
- There is extensive evidence of carcinogenicity, and
- The mode(s) of carcinogenic action and associated key events have been identified in animals, and
- The keys events that precede the cancer response in animals have been observed in the human population(s) that also shows evidence of an association of exposure to the agent with cancer.

LIKELY TO BE CARCINOGENIC TO HUMANS. This descriptor is appropriate when the available tumor effects and other key data are adequate to demonstrate carcinogenic potential to humans.
Adequate data are within a spectrum. At one end is evidence for an association between human exposure to the agent and cancer and strong experimental evidence of carcinogenicity in animals; at the other, with no human data, the weight of experimental evidence shows animal carcinogenicity by a mode or modes of action that are relevant or assumed to be relevant to humans.

SUGGESTIVE EVIDENCE OF CARCINOGENICITY, BUT NOT SUFFICIENT TO ASSESS HUMAN CARCINOGENIC POTENTIAL. This descriptor is appropriate when the evidence from human or animal data is suggestive of carcinogenicity, which raises a concern for carcinogenic effects but is judged not sufficient for a conclusion as to human carcinogenic potential. Examples of such evidence may include: a marginal increase in tumors that may be exposure-related, or evidence is observed only in a single study, or the only evidence is limited to certain high background tumors in one sex of one species. Dose-response assessment is not indicated for these agents. Further studies would be needed to determine human carcinogenic potential.

DATA ARE INADEQUATE FOR AN ASSESSMENT OF HUMAN CARCINOGENIC POTENTIAL. This descriptor is used when available data are judged inadequate to perform an

assessment. This includes a case when there is a lack of pertinent or useful data or when existing evidence is conflicting, e.g., some evidence is suggestive of carcinogenic effects, but other equally pertinent evidence does not confirm a concern.

NOT LIKELY TO BE CARCINOGENIC TO HUMANS. This descriptor is used when the available data are considered robust for deciding that there is no basis for human hazard concern. The judgment may be based on—

- Extensive human experience that demonstrates lack of carcinogenic effect (e.g., phenobarbital).
- Animal evidence that demonstrates lack of carcinogenic effect in at least two well- designed and well-conducted studies in two appropriate animal species (in the absence of human data suggesting a potential for cancer effects).
- Extensive experimental evidence showing that the only carcinogenic effects observed in animals are not considered relevant to humans (e.g., showing only effects in the male rat kidney due to accumulation of alpha-2-globulin).
- Evidence that carcinogenic effects are not likely by a particular route of exposure
- Evidence that carcinogenic effects are not anticipated below a defined dose range.

CLASSIFICATION–1996

In April 1996, EPA released the "Proposed Guidelines for Carcinogen Risk Assessment." This scheme varied from the earlier 1986 scheme in that it used descriptors rather than letters to classify carcinogenic potential. The descriptors are:

KNOWN/LIKELY. This category of descriptors is appropriate when the available tumor effects and other key data are adequate to convincingly demonstrate carcinogenic potential for humans.

CANNOT BE DETERMINED. This category of descriptors is appropriate when available tumor effects or other key data are suggestive or conflicting or limited in quantity and, thus, are not adequate to convincingly demonstrate carcinogenic potential for humans. In general, further agent specific and generic research and testing are needed to be able to describe human carcinogenic potential.

NOT LIKELY. This is the appropriate descriptor when experimental evidence is satisfactory for deciding that there is no basis for human hazard concern, as follows (in the absence of human data suggesting a potential for cancer effects).

1986 CLASSIFICATION

The following cancer classification scheme was first introduced in 1986. It was used until 1996.

GROUP A–HUMAN CARCINOGEN. This group is used only when there is sufficient evidence from epidemiologic studies to support a causal

association between exposure to the agents and cancer.

GROUP B–PROBABLE HUMAN CARCINOGEN. This group includes agents for which the weight of evidence of human carcinogenicity based on epidemiologic studies is "limited" and also includes agents for which the weight of evidence of carcinogenicity based on animal studies is "sufficient." The group is divided into two subgroups. **Group B1** is reserved for agents for which there is limited evidence of carcinogenicity from epidemiologic studies. **Group B2** is used for Agents for which there is "sufficient: evidence from animal studies and for which there is "inadequate evidence" or "no data" from epidemiologic studies.

GROUP C–POSSIBLE HUMAN CARCINOGEN. This group is used for agents with limited evidence of carcinogenicity in animals in the absence of human data.

GROUP D–NOT CLASSIFIABLE AS TO HUMAN CARCINOGENICITY. This group is generally used for agents with inadequate human and animal evidence of carcinogenicity or for which no data are available.

GROUP E–EVIDENCE OF NON-CARCINOGENICITY FOR HUMANS. This group is used for agents that show no evidence for carcinogenicity in at least two adequate animal tests in different species or in both adequate epidemiologic and animal studies.

Chemicals Evaluated for Carcinogenic Potential
Science Information Management Branch
Health Effects Division
Office of Pesticide Programs
U.S. Environmental Protection Agency

July 19, 2004

CHEMICAL	CAS No.	PC CODE	CANCER CLASSIFICATION[1]	REPORT DATE
1,3-Dibromo-5,5-dimethylhydantoin	77-48-5	006317	Not Likely to Be Carcinogenic to Humans	OPP (8/28/00)
1,3-dichloro-5-methylhydantoin	89415-87-2	128826	Not Likely to Be Carcinogenic to Humans	OPP (8/28/00)
1,4-Naphthalenedione, 2-(acetyloxy)-3-dodecyl-	57960-19-7	006329	Not Likely to Be Carcinogenic to Humans	OPP (11/13/03)
2-Benzyl-4-chlorophenol	120-32-1	062201	Group C--Possible Human Carcinogen	OPP (9/5/95)
2,4-Dichlorophenoxy acetic acid (2,4-D)	94-75-7	030001	Group D--Not Classifiable as to Human Carcinogenicity	OPP (1/29/97)
2,4-DB 2,4-DB-DMA	94-82-6	030801	Not Likely to Be Carcinogenic to Humans	OPP (6/13/03)
2,4-Imidazolidinedione, 1-bromo-3-chloro-5,5-dimethyl-	16079-88-2	006315	Not Likely to Be Carcinogenic to Humans	OPP (8/28/00)
Acephate	30560-19-1	103301	Group C--Possible Human Carcinogen	OPP (5/8/85)
Acetaldehyde	75-07-0	202300	Group B2--Probable Human Carcinogen	CRAVE[2] (1/13/88)
Acetamide	60-35-5	111101	Group C--Possible Human Carcinogen	OPP (5/29/90)
Acetamiprid	135410-20-7	099050	Not Likely to Be Carcinogenic to Humans	OPP (12/11/01)
Acetochlor	34256-82-1	121601	Likely to be Carcinogenic to Humans	OPP (6/30/04)
Acetone	67-64-1	044101	Group D--Not Classifiable as to Human Carcinogenicity	CRAVE (12/6/89)
AcetopheNone	98-86-2	129033	Group D--Not Classifiable as to Human Carcinogenicity	CRAVE (11/7/90)
Acibenzolar-S-methyl	135158-54-2	061402	Not Likely to be Carcinogenic to Humans	OPP (12/9/99)
Acifluorfen, sodium	62476-59-9	114402	Likely to be Carcinogenic to Humans at High Doses Not Likely to be Carcinogenic to Humans at Low Doses	OPP (5/21/03)
Acrinathrin	101007-06-1	129141	Group D--Not Classifiable as to Human Carcinogenicity	OPP (7/15/96)
Acrolein	107-02-8	000701	Group C--Possible Human Carcinogen	CRAVE (12/2/87)
Acrylamide	79-06-1	600008	Group B2--Probable Human Carcinogen	CRAVE (5/25/88)
Acrylonitrile	107-13-1	000601	Group B1--Probable Human Carcinogen	CRAVE (2/11/87)
Alachlor	15972-60-8	090501	Likely to be Carcinogenic to Humans (High Doses); Not Likely to be Carcinogenic to Humans (Low Doses)	OPP (6/27/97)
Aldicarb	116-06-3	098301	Group E--Evidence of Non-carcinogenicity for Humans	OPP) (9/15/98)
Aldrin	309-00-2	045101	Group B2--Probable Human Carcinogen	CRAVE (3/22/87)
Alkyl dimethyl benzyl ammonium chloride (ADBAC)	68424-85-1	069105	Not Likely to be Carcinogenic to Humans	OPP (11/18/99)
Aminopyridine, 4-	504-24-5	069201	Group D--Not Classifiable as to Human Carcinogenicity	CRAVE (5/30/89)

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Amitraz	33089-61-1	106201	Group C--Possible Human Carcinogen	OPP (10/31/90)
Amitrole	61-82-5	004401	Group B2--Probable Human Carcinogen	OPP (8/20/90)
Aniline	62-53-3	251400	Group B2--Probable Human Carcinogen	CRAVE (6/3/87)
Aramite	140-57-8	062501	Group B2--Probable Human Carcinogen	CRAVE (1/10/91)
Arsenic acid Arsenic pentoxide Arsenate, sodium	7778-39-4 1303-28-2 13464-38-5	006801 006802 013505	Group A–Human Carcinogen	IRIS (4/10/1998)
Assert	69969-22-8	128841 128842 128843	Group D--Not Classifiable as to Human Carcinogenicity	OPP (6/11/87)
Asulam	3337-71-1	106901	Group C--Possible Human Carcinogen	OPP (2/17/88)
Atrazine, hydroxyatrazine	1912-24-9	080803	Not Likely to be Carcinogenic to Humans	OPP (12/13/00)
Avermectin B1	65195-55-3	122804	Group E--Evidence of Non-carcinogenicity for humans)	OPP (6/27/96
Azafenidin	68049-83-2	119016	Data are Inadequate for an Assessment of Human Carcinogenic Potential	OPP (10/18/99)
Azinphos-methyl	86-50-0	058001	Not Likely to be Carcinogenic to Humans	OPP (12/7/93)
Azobenzene	103-33-3	007401	Group B2--Probable Human Carcinogen	CRAVE (2/3/88)
Azoxystrobin	131860-33-8	128810	Not Likely to be Carcinogenic to Humans	OPP (1/14/97)
Bardac 22 (also 2250, 2280)	7173-51-5	069149	Not Likely to be Carcinogenic to Humans	OPP (4/11/00)
BAS 510 F	188425-85-6	128008	Suggestive Evidence of Carcinogenicity, but Not Sufficient to Assess Human Carcinogenic Potential	OPP (9/25/02)
Bendiocarb	22781-23-3	105201	Group E--Evidence of Non-carcinogenicity for Humans)	OPP (12/16/97)
Benfluralin	1861-40-1	084301	Suggestive Evidence of Carcinogenicity, but Not Sufficient to Assess Human Carcinogenic Potential	OPP (12/27/01)
Benomyl	17804-35-2	099101	Group C--Possible Human Carcinogen	OPP (09/21/00)
Bensulide	741-58-2	009801	Not Likely to be Carcinogenic to Humans	OPP (6/10/97)
Bentazon	25057-89-0	275200	Group E--Evidence of Non-carcinogenicity for Humans	OPP (11/10/93)
Benzene	71-43-2	008801	Carcinogenic to Humans	IRIS (1/19/00)
Benzoic acid	65-85-0	009101	Group D--Not Classifiable as to Human Carcinogenicity)	CRAVE (3/1/89)
Bifenazate	149877-41-8	000586	Not Likely to be Carcinogenic to Humans	OPP (8/28/01)
Bifenthrin	82657-04-3	128825	Group C--Possible Human Carcinogen	OPP (4/29/92)
Biphenyl, 1,1-	92-52-4	017002	Group D--Not Classifiable as to Human Carcinogenicity	CRAVE (12/6/90)
Bis(chloroethyl)ether (BCEE)	111-44-4	029501	Group B2--Probable Human Carcinogen	CRAVE (7/23/86)
Bispyribac-Sodium	125401-92-5	078906	Not Likely to be Carcinogenic to Humans	OPP (8/2/01)
Borax	1303-96-4	011102	Group E--Evidence of Non-carcinogenicity for humans	OPP (11/24/93)
Boric acid	10043-35-3	011001	Group E--Evidence of Non-carcinogenicity for humans	OPP (11/24/93)
Boron	7440-42-8	128945	Group E--Evidence of Non-carcinogenicity for humans	OPP (11/24/93)
Bromacil	314-40-9	012301	Group C--Possible Human Carcinogen	OPP (1/13/93)
Bromotrichloromethane	75-62-7	008708	Group D--Not Classifiable as to Human Carcinogenicity	CRAVE (1/10/91)

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Bromoxynil	1689-84-5	035301	Group C--Possible Human Carcinogen	OPP (3/12/97)
Bromuconazole	116255-48-2	120503	Group E--Evidence of Non-carcinogenicity for humans	OPP (4/24/95)
Bronopol	52-51-7	216400	Group E--Evidence of Non-carcinogenicity for humans	OPP (6/16/95)
Buprofezin	69327-76-0	275100	Suggestive Evidence of Carcinogenicity, but Not Sufficient to Assess Human Carcinogenic Potential	OPP (3/15/00)
Butachlor	23184-66-9	112301	Likely to be Carcinogenic to Humans	OPP (2/26/99)
Butafenacil	134605-64-4	122004	Not Likely to be Carcinogenic to Humans	OPP (7/11/03)
Butylate (Sutan)	2008-41-5	041405	Group E--Evidence of Non-carcinogenicity for humans	OPP (11/25/92)
Cacodylic acid	75-60-5	012501	Group B2--Probable Human Carcinogen	OPP (12/14/99)
Cadmium	7440-43-9	NR	Group B1--Probable Human Carcinogen	CRAVE (11/12/86)
Cadusafos	95465-99-9	128864	Group E--Evidence of Non-carcinogenicity for humans	OPP (5/28/92)
Captafol	2939-80-2	081701	Group B2--Probable Human Carcinogen	OPP (5/15/89)
Captan	133-06-2	081301	Group B2--Probable Human Carcinogen	OPP (9/4/98)
Carbaryl	63-25-2	056801	Likely to be Carcinogenic to Humans	OPP (2/12/02)
Carbofuran	1563-66-2	090601	Not Likely to be Carcinogenic to Humans	OPP (6/17/97)
Carbon tetrachloride	56-23-5	016501	Group B2--Probable Human Carcinogen	CRAVE (12/4/86)
Carboxin	5234-68-4	090201	Not Likely to be Carcinogenic to Humans	OPP (6/5/03)
Carfentrazone-ethyl	128639-02-1	128712	Not Likely to be Carcinogenic to Humans	OPP (3/24/98)
Chlordane	57-74-9	058201	Group B2--Probable Human Carcinogen	CRAVE (4/1/87)
Chlordimeform	6164-98-3	059701	Group B2--Probable Human Carcinogen	OPP (12/20/85)
Chlorethoxyfos	54593-83-8	129006	Group D--Not Classifiable as to Human Carcinogenicity	OPP (3/9/95)
Chlorfenapyr	122453-73-0	129093	Suggestive Evidence of Carcinogenicity, but Not Sufficient to Assess Human Carcinogenic Potential	OPP (3/18/03)
Chloroaniline, p-	106-47-8	017203	Group B2--Probable Human Carcinogen	OPP (4/27/95)
Chlorobenzene	108-90-7	056504	Group D--Not Classifiable as to Human Carcinogenicity	CRAVE (4/4/90)
Chloroform	67-66-3	020701	Group B2--Probable Human Carcinogen	CRAVE (8/26/87)
Chloroneb	2675-77-6	027301	Data Are Inadequate for an Assessment of Carcinogenic Potential	OPP (12/18/03)
Chlorothalonil	1897-45-6	081901	Group B2--Probable Human Carcinogen	OPP (10/27/97)
Chlorpropham (CIPC)	101-21-3	018301	Group E--Evidence of Non-carcinogenicity for humans	OPP (10/11/94)
Chlorpyrifos	2921-88-2	059101	Group E--Evidence of Non-carcinogenicity for humans	OPP (11/23/93)
Chlorpyrifos-methyl	1351032	059102	Not Likely to be Carcinogenic to Humans	OPP (5/17/99)
Chlorsulfuron	64902-72-3	118601	Group E--Evidence of Non-carcinogenicity for humans	OPP (7/17/02)

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Chromium (VI)	18540-29-9	021101	Group A--Human Carcinogen by Inhalation	IRIS (9/3/98)
Sodium dichromate	10588-01-9	068304	Group D--Not Classifiable as to Human Carcinogenicity by Oral Route	OPP (8/28/01)
Clodinafop-propargyl	105512-06-9	125203	Likely to be Carcinogenic to Humans	OPP (12/7/99)
Clofencet (MON 21200)	82697-71-0	128726	Group C--Possible Human Carcinogen	OPP (7/23/96)
Clofentezine	74115-24-5	125501	Group C--Possible Human Carcinogen	OPP (4/3/90)
Clomazone	81777-89-1	125401	Not Likely to be Carcinogenic to Humans	OPP (1/31/01)
Clopyralid	1702-17-6	117403	Not Likely to be Carcinogenic to Humans	OPP (12/20/99)
Cloquintoced-Methylhexyl	99607-70-2	700099	Not Likely to be Carcinogenic to Humans	OPP (11/24/98)
Cloransulam-methyl	147150-35-4	129116	Group E--Evidence of Non-carcinogenicity for humans	OPP (9/30/97)
Cocamide Diethanolamine	68603-42-9	224600	Likely to be Carcinogenic to Humans	OPP (7/25/01)
Copper (metallic)	7440-50-8	022501	Group D--Not Classifiable as to Human Carcinogenicity	CRAVE (9/15/87)
Coumaphos	56-72-4	036501	Not Likely to be Carcinogenic to Humans	OPP (6/25/99)
Creosote	8001-58-9	025004	Group B1--Probable Human Carcinogen	CRAVE (5/13/87)
Cresol, p-Chloro-m-	59-50-7	064206	Group D--Not Classifiable as to Human Carcinogenicity	OPP (11/28/95)
Cryolite	15096-52-3	075101	Group D--Not Classifiable as to Human Carcinogenicity	OPP (1/26/93)
Cyanazine	21725-46-2	100101	Group C--Possible Human Carcinogen	OPP (7/30/91)
Cyclanilide	113136-77-9	026201	Not Likely to be Carcinogenic to Humans	OPP (4/9/97)
Cycloate	1134-23-2	041301	Not Likely to be Carcinogenic to Humans	OPP (9/25/03)
Cyfluthrin	68359-37-5	128831	Not Likely to be Carcinogenic to Humans	OPP (2/11/01)
Cyhalothrin	68085-85-8	128867	Group D--Not Classifiable as to Human Carcinogenicity	OPP (9/15/94)
Cyhalothrin, gamma	76703-62-3	128807	Not Likely to be Carcinogenic to Humans	OPP (3/01/04)
Cyhexatin (TCTH)	13121-70-5	101601	Not Likely to be Carcinogenic to Humans	OPP (8/1/00)
Cymoxanil	57966-95-7	129106	Not Likely to be Carcinogenic to Humans	OPP (1/21/98)
Cypermethrin & z-Cypermethrin	NR 52315-07-8	109702 129064	Group C--Possible Human Carcinogen	OPP (9/27/88)
Cyproconazole	94361-06-5	128993	Group B2--Probable Human Carcinogen	OPP (12/04/92)
Cyprodinil	121552-61-2	288202	Not Likely to be Carcinogenic to Humans	OPP (1/14/98)
Cyromazine	66215-27-8	121301	Group E--Evidence of Non-carcinogenicity for humans	OPP (1/6/95)
Dacthal (DCPA)	1861-32-1	078701	Group C--Possible Human Carcinogen	OPP (2/10/95)
Daminozide	1596-84-5	035101	Group B2--Probable Human Carcinogen	OPP (9/27/91)
Dazomet	533-74-4	035602	Group D – Not Classifiable as a Human Carcinogen	OPP (12/7/93)
DDD	72-54-8	029101	Group B2--Probable Human Carcinogen	CRAVE (6/24/87)
DDE	72-55-9	NR	Group B2--Probable Human Carcinogen	CRAVE (6/24/87)
DDT	50-29-3	029201	Group B2--Probable Human Carcinogen	CRAVE (6/24/87)
DEET	134-62-3	080301	Group D--Not Classifiable as to Human Carcinogenicity	OPP (1/4/96)

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Deltamethrin	52918-63-5	097805	Not Likely to be Carcinogenic to Humans	OPP (9/9/03)
Desmedipham	13684-56-5	104801	Group E--Evidence of Non-carcinogenicity for humans	OPP (7/26/94)
Di(2-ethylhexyl)phthalate	117-81-7	295200	Group B2--Probable Human Carcinogen	CRAVE (10/7/87)
Diazinon	333-41-5	057801	Not Likely to be Carcinogenic to Humans	OPP (6/17/97)
Dibromochloropropane (DBCP)	96-12-8	011301	Group B2--Probable Human Carcinogen	(CAG)‡
Dibromoethane, 1,2-	106-93-4	042002	Group B2--Probable Human Carcinogen	CRAVE (5/13/87)
Dibutyl phthalate	84-74-2	028001	Group D--Not Classifiable as to Human Carcinogenicity	CRAVE (8/26/87)
Dicamba	1918-00-9	029801	Group D--Not Classifiable as to Human Carcinogenicity	OPP (7/29/96)
Dichlobenil	1194-65-6	027401	Group C--Possible Human Carcinogen	OPP (7/18/95)
Dichlorobenzamide, 2,6-	2008-88-4	027402	Group D--Not classifiable as to human carcinogenicity	OPP (11/28/95)
Dichlorobenzene, 1,2-	95-50-1	059401	Group D--Not Classifiable as to Human Carcinogenicity	CRAVE (12/6/89)
Dichloroethane, 1,2-	107-06-2	042003	Group B2--Probable Human Carcinogen	CRAVE (12/4/86)
Dichloroethylene, 1,1-	75-35-4	600033	Group C--Possible Human Carcinogen	CRAVE (1/7/87)
Dichloromethane	75-09-2	042004	Group B2--Probable Human Carcinogen	CRAVE (4/6/89)
Dichloropropene, 1,3- Telone II	542-75-6	029001	Group B2--Probable Human Carcinogen	OPP (4/15/99)
Dichlorvos (DDVP)	62-73-7	084001	Suggestive Evidence of Carcinogenicity, but Not Sufficient to Assess Human Carcinogenic Potential	OPP (3/1/00)
Diclofop-methyl	51338-27-3	110902	Likely to be Carcinogenic to Humans	OPP (5/24/00)
Diclosulam	145701-21-9	129122	Not Likely to be Carcinogenic to Humans	OPP (11/9/99)
Dicofol	115-32-2	010501	Group C--Possible Human Carcinogen	OPP (4/15/92)
Dicrotophos	141-66-2	035201	Suggestive Evidence of Carcinogenicity, but Not Sufficient to Assess Human Carcinogenic Potential	OPP (10/18/99)
Dieldrin	60-57-1	045001	Group B2--Probable Human Carcinogen	CRAVE (3/5/87)
Diethyl phthalate	84-66-2	128947	Group D--Not Classifiable as to Human Carcinogenicity	CRAVE (8/26/87)
Difenoconazole	119446-68-3	128847	Group C--Possible Human Carcinogen	OPP (7/27/94)
Difenzoquat methyl sulfate	43222-48-6	106401	Group E--Evidence of Non-carcinogenicity for humans	OPP (5/24/94)
Diflubenzuron	35367-38-5	108201	Group E--Evidence of Non-carcinogenicity for humans	OPP (4/27/95)
Diflufenzopyr-sodium	109293-98-3	005107	Not Likely to be Carcinogenic to Humans	OPP (10/6/98)
Dimethenamid	87674-68-8	129051	Group C--Possible Human Carcinogen	OPP (9/15/95)
Dimethipin	55290-64-7	118901	Group C-- Possible Human Carcinogen	OPP (1/5/90)
Dimethoate	60-51-5	035001	Group C--Possible Human Carcinogen	OPP (8/29/91)
Dimethomorph	110488-70-5	268800	Not Likely to be Carcinogenic to Humans	OPP (5/11/98)
Dimethoxane	828-00-2	001001	Suggestive Evidence for Carcinogenicity in Humans	OPP (12/21/00)
Dimethyl ether	115-10-6	900382	Group D--Not Classifiable as to Human Carcinogenicity	OPP (1/12/94)
Dimethyl phthalate	131-11-3	028002	Group D--Not Classifiable as to Human Carcinogenicity	CRAVE (8/26/87)
Dimethylhydantoin, 5,5 -	118-52-5	028501	Not Likely to be Carcinogenic to Humans	OPP (8/14/2000)

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Dinocap (Karathane)	39300-45-3	036001	Group E--Evidence of Non-carcinogenicity for Humans	OPP (6/22/94)
Dinoseb	88-85-7	037505	Group C--Possible Human Carcinogen	OPP (6/19/86)
Dinotefuran	165252-70-0	044312	Not Likely to be Carcinogenic to Humans	OPP (3/5/04)
Diphenylamine	122-39-4	038501	Not Likely to be Carcinogenic to Humans	OPP (4/1/97)
Diquat dibromide	85-00-7	032201	Group E--Evidence of Non-carcinogenicity for Humans	OPP (5/12/94)
Disulfoton (Disyston)	298-04-4	032501	Group E--Evidence of Non-carcinogenicity for Humans	OPP (4/21/97)
Dithiopyr (MON 7200)	97886-45-8	128994	Group E--Evidence of Non-carcinogenicity for Humans	OPP (10/13/93)
Diuron	330-54-1	035505	Known/Likely	OPP (5/8/97)
DSMA	144-21-8	013802	Not Likely to be Carcinogenic to Humans	OPP (7/26/00)
Emamectin	137512-74-4	122806	Not Likely to be Carcinogenic to Humans	OPP (3/19/98)
Endosulfan	115-29-7	079401	Not Likely to be Carcinogenic to Humans	OPP (1/31/00)
Endrin	72-20-8	041601	Group D--Not Classifiable as to Human Carcinogenicity	CRAVE (10/19/88)
Epichlorohydrin	106-89-8	097201	Group B2--Probable Human Carcinogen	CRAVE (10/29/86)
Epoxiconazole	106325-08-0 133855-98-8	123909	Likely to be Carcinogenic to Humans	OPP (1/24/01)
EPTC	759-94-4	041401	Not Likely to be Carcinogenic to Humans	OPP (8/31/99)
Bioallethrin Esbiothrin	584-79-2 28434-00-6	004003 004004	Suggestive Evidence of Carcinogenicity, but Not Sufficient to Assess Human Carcinogenic Potential	OPP (10/29/03)
Esfenvalerate	66230-04-4	109303	Group E--Evidence of Non-carcinogenicity for Humans	OPP (7/1/96)
Ethalfluralin	55283-68-6	113101	Group C--Possible Human Carcinogen	OPP (9/14/94)
Ethephon	16672-87-0	099801	Group D--Not Classifiable as to Human Carcinogenicity	OPP (5/5/94)
Ethion	563-12-2	058401	Group E--Evidence of Non-carcinogenicity for humans	OPP (1/26/94)
Etofenprox	80844-07-1	128965	Group C--Possible Human Carcinogen	OPP (5/24/90)
Ethofumesate	26225-79-6	110601	Group D--Not Classifiable as to Human Carcinogenicity	OPP (2/24/94)
Ethoprop (Ethoprophos)	13194-48-4	041101	Likely to be Carcinogenic to Humans	OPP (10/7/98)
Ethylene diamine	107-15-3	004205	Group D--Not Classifiable as to Human Carcinogenicity	CRAVE (7/25/91)
Ethylene thiourea (ETU)	96-45-7	600016	Group B2--Probable Human Carcinogen	OPP (3/19/90)
Etoxazole	153233-91-1	107091	Not Likely to be Carcinogenic to Humans	OPP (8/7/03)
Famoxadone	131807-57-3	113202	Not Likely to be Carcinogenic to Humans	OPP (4/16/03)
Ferdam	128-04-1	034804	Likely to be Carcinogenic to Humans	OPP (4/6/00)
Fenamidone	161326-34-7	046679	Not Likely to be Carcinogenic to Humans	OPP (7/12/02)
Fenamiphos (Nemacur)	22224-92-6	100601	Group E--Evidence of Non-carcinogenicity for Humans	OPP (11/23/93)
Fenarimol	60168-88-9	206600	Not Likely to be Carcinogenic to Humans	OPP (9/5/01)
Fenbuconazole (Fenethanil)	114369-43-6	129011	Group C--Possible Human Carcinogen	OPP (4/15/96)

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Fenbutatin oxide (Vendex)	13356-08-6	104601	Group E--Evidence of Non-carcinogenicity for Humans	OPP (10/8/92)
Fenhexamid	126833-17-8	090209	Not Likely to be Carcinogenic to Humans	OPP (3/4/99)
Fenitrothion (Sumithion)	122-14-5	105901	Group E--Evidence of Non-carcinogenicity for Humans	OPP (7/13/93)
Fenoxycarb	72490-01-8	125301	Likely to be Carcinogenic to Humans	OPP (12/22/97)
Fenpropathrin (Danitol)	39515-41-8	127901	Not Likely to be Carcinogenic to Humans	OPP (12/22/03)
Fenpryroximate	134098-61-6	129131	Not Likely to be Carcinogenic to Humans	OPP (2/19/97)
Fenthion	55-38-9	053301	Group E--Evidence of Non-carcinogenicity for Humans	OPP (3/11/96)
Fenvalerate (Pydrin)	51630-58-1	109301	Group E--Evidence of Non-carcinogenicity for Humans	OPP (7/1/96)
Fipronil	120068-37-3	129121	Group C--Possible Human Carcinogen	OPP (7/18/95)
Fluazinam	79622-59-6	129098	Suggestive Evidence of Carcinogenicity to Humans	OPP (3/29/01)
Flucarbazone sodium	181274-17-9	114009	Not Likely to be Carcinogenic to Humans	OPP (7/19/00)
Fludioxonil (Maxim)	131341-86-1	071503	Group D--Not Classifiable as to Human Carcinogenicity	OPP (9/19/96)
Flufenpyr-ethyl	188489-07-8	108853	Not Likely to be Carcinogenic to Humans	OPP (6/8/03)
Flumetsulam (XRD-498)	98967-40-9	129016	Group E--Evidence of Non-carcinogenicity for Humans	OPP (6/23/93)
Flumiclorac pentyl	87546-18-7	128724	Group E--Evidence of Non-carcinogenicity for Humans	OPP (9/7/94)
Flumioxazin	103361-09-7 141490-50-8	129034	Not Likely to be Carcinogenic to Humans	OPP (2/22/01)
Fluometuron	2164-17-2	035503	Group C--Possible Human Carcinogen	OPP (8/28/96)
Fluridone	59756-60-4	112900	Group E--Evidence of Non-carcinogenicity for Humans	OPP (7/1/85)
Fluroxypyr	69377-81-7	128959 128968	Not Likely to be Carcinogenic to Humans	OPP (1/28/98)
Fluthiacet-methyl	117337-19-6	108803	Likely to be Carcinogenic to Humans	OPP (12/8/98)
Flutolanil	66332-96-5	128975	Group E--Evidence of Non-carcinogenicity for Humans	OPP (6/9/94)
Folpet	133-07-3	081601	Group B2--Probable Human Carcinogen	OPP (9/4/86)
Fomesafen	72178-02-0	123802	Group C--Possible Human Carcinogen	OPP (8/27/86)
Fonofos	944-22-9	041701	Group E--Evidence of Non-carcinogenicity for Humans	OPP (11/10/93)
Foramsulfuron	173159-57-4	122020	Not Likely to be Carcinogenic to Humans	OPP (9/19/01)
Formaldehyde	50-00-0	043001	Group B1--Probable Human Carcinogen	CRAVE (2/3/88)
Formetanate hydrochloride	23422-53-9	097301	Group E–Evidence of Non-carcinogenicity for Humans	OPP (5/20/96)
Fosetyl-Al	39148-24-8	123301	Not Likely	OPP (4/22/99)

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Fosthiazate	98886-44-3	129022	Not Likely to be Carcinogenic to Humans	OPP (9/15/03)
Furmecyclox	60568-05-0	122601	Group B2–Probable Human Carcinogen	OPP (7/3/85)
Furilazole (MON 13900)	121776-33-8	911596	Likely to be Carcinogenic to Humans	OPP (9/21/99)
Glufosinate ammonium	77182-82-2	128850	Not Likely to be Carcinogenic to Humans	OPP (5/17/99)
Glyphosate trimesium	81591-81-3	128501	Group E–Evidence of Non-carcinogenicity for Humans	OPP (7/26/94)
Glyphosate	1071-83-6	417300	Group E–Evidence of Non-carcinogenicity for Humans	OPP (12/16/91)
Clothianidin	210880-92-5	044309	Not Likely to be Carcinogenic to Humans	OPP (1/6/03))
Halosulfuron-methyl	100784-20-1	128721	Not Likely to be Carcinogenic to Humans	OPP (2/26/98)
Haloxyfop-methyl (Verdict)	690806-40-2	125201	Group B2–Probable Human Carcinogen	OPP (9/18/89)
Heptachlor	76-44-8	044801	Group B2–Probable Human Carcinogen	CRAVE (4/1/87)
Heptachlor epoxide	1024-57-3	044801	Group B2–Probable Human Carcinogen	CRAVE (4/1/87)
Hexachlorobenzene (HCB)	118-74-1	061001	Group B2–Probable Human Carcinogen	CRAVE (3/1/89)
Hexachlorocyclohexane	608-73-1	008901	Group B2–Probable Human Carcinogen	CRAVE (12/17/86)
Hexachlorocyclopentadiene	77-47-4	027502	Group D--Not Classifiable as to Human Carcinogenicity	CRAVE (10/5/89)
Hexachloroethane	67-72-1	045201	Group C--Possible Human Carcinogen	CRAVE (7/23/86)
Hexaconazole (Anvil)	79983-71-4	128925	Group C--Possible Human Carcinogen	OPP (1/21/99)
HexaziNone	51235-04-2	107201	Group D--Not Classifiable as to Human Carcinogenicity	OPP (7/27/94)
Hexythiazox (Savey)	78587-05-0	128849	Group C--Possible Human Carcinogen	OPP (3/16/88)
HOE 107892	135590-91-9	811800	Not Likely to be Carcinogenic to Humans	OPP (10/13/98)
HydramethylNon (Amdro)	67485-29-4	118401	Group C--Possible Human Carcinogen	OPP (3/28/91)
Hydrogen cyanamide	420-04-2	014002	Group C--Possible Human Carcinogen	OPP (9/15/93)
Hydroprene (Altozar)	41096-46-2	486300	Group D--Not Classifiable as to Human Carcinogenicity	OPP (6/8/95)
Imazalil	35554-44-0	111901	Likely to be Carcinogenic to Humans	OPP (12/7/99)
Imazapic	81334-60-3	129041	Group E--Evidence of Non-carcinogenicity for Humans	OPP (9/27/95)
Imazamox	114311-32-9	129171	Not Likely to be Carcinogenic to Humans	OPP (2/27/97)
Imazapyr	81334-34-1	128821	Group E--Evidence of Non-carcinogenicity for Humans	OPP (10/5/95)
Imazethapyr	81335-77-5	128922	Not Likely to be Carcinogenic to Humans	OPP (1/31/02)
Imidacloprid	105827-78-9	129099	Group E--Evidence of Non-carcinogenicity for Humans	OPP (11/10/93)
Indoxacarb (DPX-MP062)	173584-44-6	067710	Not Likely to be Carcinogenic to Humans	OPP (7/17/00)
Iodosulfuron	144550-36-7	122021	Not Likely to be Carcinogenic to Humans	OPP (1/5/04)
Iprodione (Glycophene)	36734-19-7	109801	Likely to be Carcinogenic to Humans	OPP (11/19/97)

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Iprovalicarb	140923-17-7	098359	Likely to be Carcinogenic to Humans	OPP (2/6/02)
Isofenphos	25311-71-1	109401	Group E--Evidence of Non-carcinogenicity for Humans	OPP (1/13/98)
Isophorone	78-59-1	047401	Group C--Possible Human Carcinogen	OPP (9/2/99)
Isoxaben	82558-50-7	125851	Group C--Possible Human Carcinogen	OPP (1/4/89)
Isoxadifen-ethyl	NR	823000	Not Likely to be Carcinogenic to Humans	OPP (1/29/01)
Isoxaflutole	141112-29-0	123000	Likely to be Carcinogenic to Humans	OPP (8/6/97)
Kathon 886	55965-84-9	107106	Group D--Not Classifiable as to Human Carcinogenicity	OPP (6/30/95)
KBR 3023 (propidine)	119515-38-7	070705	Not Likely to be Carcinogenic to Humans	OPP (6/9/99)
Kresoxim-methyl	143390-89-0	129111	Likely to be Carcinogenic to Humans	OPP (8/19/99)
Lactofen (Cobra)	77501-63-4	128888	Likely to be Carcinogenic in Humans at High Doses Not Likely to be Carcinogenic to Humans at Low Doses	OPP (4/8/02)
lambda-cyhalothrin	91465-08-6	128897	Group D--Not classifiable as to Human Carcinogenicity	OPP (9/12/02)
Lindane	58-89-9	009001	Suggestive Evidence of Carcinogenicity, but Not Sufficient to Assess Human Carcinogenic Potential	OPP (11/29/01)
Linuron	330-55-2	035506	Group C--Possible Human Carcinogen	OPP (11/20/01)
Malathion	121-75-5	057701	Suggestive Evidence of Carcinogenicity but Not Sufficient to Assess Human Carcinogenic Potential	OPP (4/28/00)
Maleic hydrazide	123-33-1	051501	Group E--Evidence of Non-carcinogenicity for Humans	OPP (11/10/93)
Mancozeb	8018-01-7	014504	Group B2--Probable Human Carcinogen	OPP (7/7/99)
Maneb	12427-38-2	014505	Group B2--Probable Human Carcinogen	OPP (7/7/99)
MB46513 (photodegradate of Fipronil)	120067-83-6	600050	Not Likely to be Carcinogenic to Humans	OPP (12/6/00)
MBC (Carbendazim)	10605-21-7	128872	Group C--Possible Human Carcinogen	OPP (4/7/89)
MCPA (and salts and esters)	94-74-6	030501	Not Likely to be Carcinogenic to Humans	OPP (10/29/03)
Mecroprop-p	16484-77-8	129046	Suggestive Evidence of Carcinogenicity, but Not Sufficient to Assess Human Carcinogenic Potential	OPP (1/15/03)
Mefenoxam	70630-17-0	113502	Not Likely to be Carcinogenic to Humans	OPP (5/17/00)
Melamine	108-78-1	777201	Group D--Not Classifiable as to Human Carcinogenicity	OPP (7/29/92)
Mepiquat chloride	24307-26-4	109101	Not likely to be carcinogenic to Non-humans	OPP (2/19/03)
Mercaptobenzothiazole, 2-	149-30-4	051701	Group C--Possible Human Carcinogen	OPP (11/19/92)
Mercury (Inorganic)	7439-97-6	052301	Group D--Not Classifiable as to Human Carcinogenicity	CRAVE (1/13/88)
Mesosulfuron Methyl	208465-21-8	122009	Not Likely to be Carcinogenic to Humans	OPP (3/4/04)

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Mesotrione	104206-82-8	122990	Not Likely to be Carcinogenic to Humans	OPP (4/12/01)
Metalaxyl	57837-19-1	113501	Group E--Evidence of Non-carcinogenicity for Humans	OPP (12/31/85)
Metam sodium Metam potassium	137-42-8	039002 039003	Group B2--Probable Human Carcinogen	OPP (3/21/00)
Methamidophos (Monitor)	10265-92-6	101201	Not Likely to be Carcinogenic to Humans	OPP (2/12/98)
Methanearsonic Acid	5902-95-4	013806	Not Likely to be Carcinogenic to Humans	OPP (12/14/00)
Methidathion	950-37-8	100301	Group C--Possible Human Carcinogen	OPP (2/19/88)
Methiocarb (Mesurol)	2032-65-7	100501	Group D--Not Classifiable as to Human Carcinogenicity	OPP (3/2/93)
Methomyl	16752-77-5	090301	Group E--Evidence of Non-carcinogenicity for Humans	OPP (10/26/96)
Methoxychlor	72-43-5	034001	Group D--Not Classifiable as to Human Carcinogenicity	CRAVE (10/7/87)
Methoxyfenozide	161050-58-4	121027	Not Likely to be Carcinogenic to Humans	OPP (7/1/99)
Methyl ethyl ketone (MEK)	78-93-3	044103	Group D--Not Classifiable as to Human Carcinogenicity	CRAVE (5/30/89)
Methyl isothiocyanate	6317-18-6	068103	Group B2--Probable Human Carcinogen -- Based on Metam Sodiam Data	OPP (2/2200)
Methyl bromide	74-83-9	053201	Not Likely	OPP (8/4/92)
Methyl parathion	298-00-0	053501	Not Likely to be Carcinogenic to Humans	OPP (12/1/97)
Methylene bis(thiocyanate)	6317-18-6	068102	Group B2--Probable Human Carcinogen -- Based on Metam Sodiam Data	OPP (2/22/00)
Methylphenol, 3-	108-39-4	022102	Group C--Possible Human Carcinogen	CRAVE (10/5/89)
Metiram	9006-42-2	014601	Group B2--Probable Human Carcinogen	OPP (7/7/99)
Metolachlor and S-Metolachlor	51218-45-2 87392-12-9	108800 108801	Group C Possible Human Carcinogen	(OPP (11/16/94)
Metribuzin (Sencor)	21087-64-9	101101	Group D--Not Classifiable as to Human Carcinogenicity	OPP (5/16/95)
Metsulfuron	74223-64-6	122010	Not Likely to be Carcinogenic to Humans	OPP (3/14/02)
MGK Repellent 326	136-45-8	047201	Group B2--Probable Human Carcinogen	OPP (11/12/02)
MGK-264	113-48-4	057001	Group C--Possible Human Carcinogen	OPP (6/7/95)
Molinate	2212-67-1	041402	Suggestive Evidence of Carcinogenicity to Humans	OPP (12/14/00)
MON 4660	71526-07-3	600046	Likely to be Carcinogenic to Humans	OPP (12/9/99)
MSMA	2163-80-6	013803	Not likely to Carcinogenic to Humans	OPP (7/26/00)
Myclobutanil	88671-89-0	128857	Group E--Evidence of Non-carcinogenicity for Humans	OPP (6/16/94)
Naled	300-76-5	034401	Group E--Evidence of Non-carcinogenicity for Humans	OPP (8/31/94)
Naptalam Naptalam, sodium salt	132-66-1 132-67-2	030702 030703	Group D--Not Classifiable as to Human Carcinogenicity	OPP (9/7/94)
Nicosulfuron	111991-09-4	129008	Group E--Evidence of Non-carcinogenicity for Humans	OPP (9/1/98)
Nitrapyrin	1929-82-4	069203	Likely to be Carcinogenic to Humans	OPP (5/5/00)
Nitrobenzene	98-95-3	056501	Group D--Not Classifiable as to Human Carcinogenicity	CRAVE (11/8/89)

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Norflurazon	27314-13-2	105801	Group C--Possible Human Carcinogen	OPP (11/2/90)
Novaluron	116714-46-6	124002	Not Likely to be Carcinogenic to Humans	OPP (2/4/04)
Orthophenylphenol Sodium salt	90-43-7 132-27-4	064103 064104	Group B2--Probable Human Carcinogen	OPP (8/24/94)
Oryzalin	19044-88-3	104201	Likely to be Carcinogenic to Humans	OPP (5/14/03)
Oxadiazon	19666-30-9	109001	Group C--Possible Human Carcinogen	OPP (5/1/01)
Oxadixyl	77732-09-3	126701	Group C--Possible Human Carcinogen	OPP (1/4/89)
Oxamyl	23135-22-0	103801	Group E--Evidence of Non-carcinogenicity for Humans	OPP (11/5/96)
Oxydemeton-methyl	301-12-2	058702	Not Likely to be Carcinogenic to Humans	OPP (7/24/97)
Oxyfluorfen	42874-03-3	111601	Group C--Possible Human Carcinogen	OPP (9/29/89)
Oxytetracycline	2058-46-0	006308	Group D--Not Classifiable as to Human Carcinogenicity	OPP (12/18/92)
Oxythioquinox	2439-01-2	054101	Group B2--Probable Human Carcinogen	OPP (2/15/96)
Paclobutrazol	76738-62-0	125601	Group D--Not Classifiable as to Human Carcinogenicity	OPP (6/23/94)
Paradichlorobenzene	106-46-7	061501	Group C--Possible Human Carcinogen	OPP (4/27/89)
Paranitrophenol	100-02-7	056301	Group D--Not Classifiable as to Human Carcinogenicity	OPP (5/14/96)
dichloride	1910-42-5	061601	Group E--Evidence of Non-carcinogenicity for Humans	OPP (3/15/89)
Ethyl parathion	56-38-2	057501	Group C--Possible Human Carcinogen	OPP (9/11/91)
Pebulate	1114-71-2	041403	Not Likely to be Carcinogenic to Humans	OPP (12/7/98)
Pendimethalin	40487-42-1	108501	Group C--Possible Human Carcinogen	OPP (7/24/92)
Pentachloronitrobezene	82-68-8	056502	Group C--Possible Human Carcinogen	OPP (12/18/92)
Pentachlorophenol	87-86-5	063001	Group B2--Probable Human Carcinogen	OPP (1/3/91)
Permethrin	52645-53-1	109701	Suggestive Evidence of Carcinogenicity, but Not Sufficient to Assess Human Carcinogenic Potential	OPP (6/22/04)
Phenmedipham	13684-63-4	098701	Group D--Not Classifiable as to Human Carcinogenicity	OPP (4/28/93)
Phenol	108-95-2	064001	Group D--Not Classifiable as to Human Carcinogenicity	CRAVE (8/2/89)
Phorate (Thimet)	298-02-2	057201	Group E--Evidence of Non-carcinogenicity for Humans	OPP (12/30/93)
Phosalone	2310-17-0	097701	Not Likely to be Carcinogenic to Humans	OPP (8/12/99)
Phosmet	732-11-6	059201	Suggestive Evidence of Carcinogenicity, but Not Sufficient to Assess Human Carcinogenic Potential	OPP (10/27/99)
Phosphamidon	13171-21-6	018201	Group C--Possible Human Carcinogen	OPP (5/31/89)
Phosphine	7803-51-2	066500	Group D--Not Classifiable as to Human Carcinogenicity	CRAVE (3/31/92)
Phostebupirim (Bay mat 7484)	96182-53-5	129086	Group E--Evidence of Non-carcinogenicity for Humans	OPP (4/27/97)
Picloram Acid -triisopropanolamine salt -ethylhexyl ester -potassium salt	1918-02-1 6753-47-5 2545-60-0 35832-11-2	005101 005102 005103 005104	Group E--Evidence of Non-carcinogenicity for Humans	OPP (2/10/89)
Piperonyl butoxide	51-03-6	067501	Group C--Possible Human Carcinogen	OPP (6/7/95)

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Pirimiphos-methyl	29232-93-7	108102	Not Yet Determined	OPP (1/29/98)
Poly(hexamethylenebiguanide) (PHMB)	32289-58-0	111801	Suggestive Evidence of Carcinogenicity, but Not Sufficient to Assess Human Carcinogenic Potential	OPP (4/9/03)
Polychlorinated biphenyls	1336-36-3	017801	Group B2--Probable Human Carcinogen	CRAVE (4/22/87)
Potassium dichromate	7778-50-9	068302	Not Likely to be Carcinogenic to Humans	OPP (8/28/01)
Prallethrin	23031-36-9	128722	Not Likely to be Carcinogenic to Humans	OPP (6/27/03)
Primisulfuron-methyl	86209-51-0	128973	Group D--Not Classifiable as to Human Carcinogenicity	OPP (5/3/90)
Prochloraz	67747-09-5	128851	Group C--Possible Human Carcinogen	OPP (7/1/88)
Procymidone	32809-16-8	129044	Group B2--Probable Human Carcinogen	OPP (4/5/91)
Prodiamine	29091-21-2	110201	Group C–Possible Human Carcinogen	OPP (7/15/91)
Profenofos	41198-08-7	111401	Group E–Evidence of Non-carcinogenicity for Humans	OPP (2/6/95)
Prohexadione Calcium	127277-53-6	112600	Not Likely to be Carcinogenic to Humans	OPP (4/14/00)
Prometon	1610-18-0	080804	Group D--Not Classifiable as to Human Carcinogenicity	OPP (9/17/92)
Prometryn	7287-19-6	080805	Group E--Evidence of Non-carcinogenicity for Humans	OPP (7/25/94)
Pronamide (Kerb)	23950-58-5	101701	Group B2--Probable Human Carcinogen	OPP (5/26/93)
Propachlor	1918-16-7	019101	Likely to be Carcinogenic to Humans	OPP (10/16/97)
Propamocarb hydrochloride	25606-41-1	119302	Not Likely	OPP (5/31/00)
Propanil	709-98-8	028201	Suggestive Evidence of Carcinogenicity but Not Sufficient to Assess Human Carcinogenic Potential	OPP (6/19/01)
Propargite (Omite)	2312-35-8	097601	Group B2--Probable Human Carcinogen	OPP (7/23/92)
Propazine	139-40-2	080808	Group C--Possible Human Carcinogen	OPP (5/8/97)
Propetamphos	31218-83-4	113601	Not Likely to be Carcinogenic to Humans	OPP (12/2/98)
Propoxur	114-26-1	047802	Group B2–Probable Human Carcinogen	OPP (6/17/96)
Propiconazole	60207-90-1	122101	Group C–Possible Human Carcinogen	OPP (9/14/92)
Propylene oxide	75-56-9	042501	Group B2–Probable Human Carcinogen	CRAVE (4/5/90)
Prosulfuron	94125-34-5	129031	Data Are Inadequate for an Assessment of Human Carcinogenic Potential	OPP (1/24/00)
PT807-HC1 (Ecolyst)	NR	069089	Not Likely to be Carcinogenic to Humans	OPP (10/19/99)
Pymetrozine	123312-89-0	101103	Likely to be Carcinogenic to Humans	OPP (8/24/99)
Pyraclostrobin	175013-18-0	099100	Data Are Inadequate for an Assessment of Human Carcinogenic Potential	OPP (9/10/03)
Pyraflufen-Ethyl	129630-19-9	030090	Likely to be Carcinogenic to Humans	OPP (10/8/02)
Pyrethrins	8003-34-7	069001	Suggestive Evidence of Carcinogenicity but Not Sufficient to Assess Human Carcinogenic Potential	OPP (6/22/04)
Pyridaben	96489-71-3	129105	Group E--Evidence of Non-carcinogenicity for Humans	OPP (5/11/94)
Pyrimethanil	53112-28-0	288201	Group C--Possible Human Carcinogen	OPP (2/12/97)

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Pyriproxyfen	95737-68-1	129032	Group E--Evidence of Non-carcinogenicity for Humans	OPP (9/15/95)
Pyrithiobac-sodium	123343-16-8	078905	Group C--Possible Human Carcinogen	OPP (9/5/95)
Quinclorac	84087-01-4	128974	Group D--Not Classifiable as to Human Carcinogenicity	OPP (8/26/92)
Quinoxyfen	124495-18-7	055459	Not Likely to be Carcinogenic to Humans	OPP (1/28/03)
Quizalofop ethyl	76578-14-8	128201	Group D--Not Classifiable as to Human Carcinogenicity	OPP (3/17/88)
Rimsulfuron (DPX-E9636)	122931-48-0	129009	Not Likely to Be Carcinogenic to Humnas	OPP (2/19/98)
RoteNone	83-79-4	071003	Group E--Evidence of Non-carcinogenicity for Humans	OPP (10/5/88)
Selenium and compounds	7782-49-2	072001	Group D--Not Classifiable as to Human Carcinogenicity	CRAVE (3/7/90)
Sethoxydim	74051-80-2	121001	Not Likely to Be Carcinogenic in Humans	OPP (3/19/03)
Silver	7440-22-4	072501	Group D--Not Classifiable as to Human Carcinogenicity	CRAVE (9/22/88)
Silvex (2,4,5-TP)	93-72-1	082501	Group D--Not Classifiable as to Human Carcinogenicity	CRAVE (12/2/87)
Simazine	122-34-9	080807	Group C--Possible Human Carcinogen	OPP (5/24/90)
Sodium omadine	15922-78-8	088004	Group D--Not Classifiable as to Human Carcinogenicity	OPP (5/16/95)
Sodium dichromate	3173233	068304	Not Likely to be Carcinogenic to Humans	OPP (8/28/01)
Spinosad (XDE-105)	131929-60-7	110003	Not Likely to be Carcinogenic to Humans	OPP (6/17/97)
Spiroxamine	118134-30-8	120759	Not Likely to be Carcinogenic to Humans	OPP (11/14/03)
Sulfentrazone	122836-35-5	129081	Group E--Evidence of Non-carcinogenicity for Humans	OPP (5/7/96)
Sulfluramid	4151-50-2	128992	No Data Available	
Sulfosulfuron	141776-32-1	085601	Likely to be Carcinogenic to Humans	OPP (10/28/98)
Sulfuryl fluoride	2699-79-8	078003	Not Likely to be Carcinogenic to Humans	OPP (5/24/01)
Sulprofos	35400-43-2	111501	Group E--Evidence of Non-carcinogenicity for Humans	OPP (3/26/96)
Surfonic AGM-550	NR	870401	No Data Available	NR
TCMTB (Busan 72)	21564-17-0	035603	Group C--Possible Human Carcinogen	OPP (8/28/96)
Tebuconazole	107534-96-3	128997	Group C--Possible Human Carcinogen	OPP (9/15/93)
Tebufenozide	112410-23-8	129026	Group E--Evidence of Non-carcinogenicity for Humans	OPP (8/29/94)
Tebufenpyrad	119168-77-3	090102	Suggestive Evidence of Carcinogenicity, but Not Sufficient to Assess Human Carcinogenic Potential	OPP (5/15/02)
Tebuthiuron	34014-18-1	105501	Group D--Not Classifiable as to Human Carcinogenicity	OPP (3/1/91)
Tefluthrin	79538-32-2	128912	Not Yet Evaluated	OPP (11/14/97)
Temephos	3383-96-8	059001	Not Yet Determined	OPP (5/12/98)
Tepraloxydim	149979-41-9	121005	Data Are Inadequate for an Assessment of Human Carcinogenic Potential	OPP (2/26/01)

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Terbacil	5902-51-2	012701	Group E--Evidence of Non-carcinogenicity for Humans	OPP (9/30/94)
Terbufos	13071-79-9	105001	Group E--Evidence of Non-carcinogenicity for Humans	OPP (2/1/94)
Terbuthylazine	5915-41-3	080814	Group D--Not Classifiable as to Human Carcinogenicity	OPP (8/24/94)
Terbutryn	886-50-0	080813	Group C--Possible Human Carcinogen	OPP (3/3/88)
Terrazole	2593-15-9	084701	Group B2--Probable Human Carcinogen	OPP (1/9/91)
Tetrachloroethane, 1,1,2,2-	79-34-5	078601	Group C--Possible Human Carcinogen	CRAVE (6/26/86)
Tetrachlorvinphos	961-11-5	083701	Likely to be Carcinogenic to Humans	OPP (3/7/02)
Tetraconazole	112281-77-3	120603	Likely to be Carcinogenic to Humans	OPP (1/11/00)
Tetramethrin	7696-12-0	069003	Group C--Possible Human Carcinogen	OPP (12/11/89)
Thallium(I) sulfate	7446-18-6	080001	Group D--Not Classifiable as to Human Carcinogenicity	CRAVE (11/8/89)
Thiabendazole	148-79-8	060101	Likely to be Carcinogenic to Humans at High Does; Not Likely to be Carcinogenic to Humans at Low Doses	OPP (3/8/02)
Thiacloprid	111988-49-9	014019	Likely to be Carcinogenic to Humans	OPP (3/26/03)
Thiafluamide (FOE 5043)	142459-58-3	121903	Not Likely to be Carcinogenic to Humans	OPP (7/16/97)
Thiamethoxam	153719-23-4	060109	Likely to be Carcinogenic to Humans	OPP (6/20/00)
Thiazopyr (MON 13200)	117718-60-2	129100	Group C--Possible Human Carcinogen	OPP (5/25/94)
Thiobencarb (Bolero)	28249-77-6	108401	Group D--Not Classifiable as to Human Carcinogenicity	OPP (6/10/96)
Thiocyclam hydrogen oxalate	31895-22-4	128868	Group D--Not Classifiable as to Human Carcinogenicity	OPP (9/15/94)
Thiodicarb	59669-26-0	114501	Group B2--Probable Human Carcinogen	OPP (6/10/96)
Thiophanate-methyl	23564-05-8	102001	Likely to be Carcinogenic to Humans	OPP (12/8/01)
Thiram	137-26-8	079801	Not Likely to be Carcinogenic to Humans	OPP (4/14/03)
Toluene	108-88-3	080601	Group D--Not Classifiable as to Human Carcinogenicity	CRAVE (9/15/87)
Tolylfluanid	731-27-1	309200	Likely to be Carcinogenic to Humans	OPP (5/01/02)
Toxaphene	8001-35-2	080501	Group B2--Probable Human Carcinogen	CRAVE (3/5/87)
Tralkoxydim	87820-88-0	121000	Likely to be Carcinogenic to Humans	OPP (10/22/98)
Triadimefon	43121-43-3	109901	Group C--Possible Human Carcinogen	OPP (12/4/96)
Triadimenol	55219-65-3	127201	Group C--Possible Human Carcinogen	OPP (1/29/88)
Tralkoxydim	87820-88-0	121000	Suggestive Evidence of Carcinogenicity, but Not Sufficient to Assess Human Carcinogenic Potential Likely to be Carcinogenic to Humans	OPP (6/30/04)
Triallate	2303-17-5	078802	Group C--Possible Human Carcinogen	OPP (1/12/94)
Triasulfuron	82097-50-5	128969	Group E--Evidence of Non-carcinogenicity for Humans	OPP (3/11/91)
Triazamate	112143-82-5	128100	Not Likely to be Carcinogenic to Humans	OPP (12/1/97)
Tribenuron methyl	101200-48-0	128887	Group C--Possible Human Carcinogen	OPP (7/14/89)
Tribufos (Tribuphos/DEF)	78-48-8	074801	Likely to be Carcinogenic to Humans (High Doses); Not Likely to be Carcinogenic to Humans (Low Doses)	OPP (5/22/97)

CHEMICAL	CAS No.	PC CODE	CANCER CLASSIFICATION[1]	REPORT DATE
Trichlorfon (Trichlorphon)	52-68-6	057901	Likely to be Carcinogenic to Humans (High Doses), Not Likely to be Carcinogenic to Humans (Low Doses)	OPP (7/15/99)
Trichlorobenzene, 1,2,4-	120-82-1	081101	Group D--Not Classifiable as to Human Carcinogenicity	CRAVE (10/19/88)
Trichloroethane, 1,1,2-	79-00-5	081203	Group C--Possible Human Carcinogen	CRAVE (7/26/86)
Trichloroethane, 1,1,1-	71-55-6	081201	Group D--Not Classifiable as to Human Carcinogenicity	CRAVE (8/5/87)
Trichlorophenol, 2,4,6-	88-06-2	064212	Group B2--Probable Human Carcinogen	CRAVE (9/7/89)
Triclopyr (salts & esters)	55335-06-3	116001	Group D--Not Classifiable as to Human Carcinogenicity	OPP (5/8/96)
Triclosan	3380-34-5	054901	Not Yet Determined.	OPP (10/22/98)
Tridiphane	58138-08-2	123901	Group C--Possible Human Carcinogen	OPP (4/22/86)
Triforine	26644-46-2	107901	Suggestive Evidence of Carcinogenicity, but Not Sufficient to Assess Human Carcinogenic Potential Likely to be Carcinogenic to Humans	OPP (6/29/04)
Trifloxystrobin	141517-21-7	129112	Not Likely to be Carcinogenic to Humans	OPP (6/16/99)
Trifloxysulfuron-sodium	290332-10-4	119009	Not Likely to be Carcinogenic to Humans	OPP (7/22/03)
Triflumizole	68694-11-1	128879	Group E--Evidence of Non-carcinogenicity for Humans	OPP (8/10/93)
Trifluralin (Treflan)	1582-09-8	036101	Group C--Possible Human Carcinogen	OPP (4/11/86)
Triflusulfuron-methyl	126535-15-7	129002	Group C--Possible Human Carcinogen	OPP (5/28/96)
Triphenyltin hydroxide	76-87-9	083601	Group B2--Probable Human Carcinogen	OPP (5/24/90)
Troysan polyphase (IPBC)	55406-53-6	107801	Not Likely to be Carcinogenic to Humans	OPP (12/4/96)
UDMH	57-14-7	600018	Group B2--Probable Human Carcinogen	OPP (7/26/91)
UMP-488 (PAL 6000)	111578-32-6	129025	Group E--Evidence of Non-carcinogenicity for Humans	OPP (5/6/94)
Uniconazole	83657-22-1	128976	Group C--Possible Human Carcinogen	OPP (10/11/90)
Vinclozolin	50471-44-8	113201	Group C--Possible Human Carcinogen	OPP (6/20/00)
White phosphorus	7723-14-0	066502	Group D--Not Classifiable as to Human Carcinogenicity	CRAVE (6/15/90)
Xylene	1330-20-7	086802	Group D--Not Classifiable as to Human Carcinogenicity	CRAVE (12/2/87)
Zinc and compounds	7440-66-6	129015	Group D--Not Classifiable as to Human Carcinogenicity	CRAVE (6/15/90)
Ziram	137-30-4	034805	Suggestive Evidence of Carcinogenicity, but Not Sufficient to Assess Human Carcinogenic Potential Likely to be Carcinogenic to Humans	OPP (2/6/03)
Zoxamide	156052-68-5	101702	Not Likely to be Carcinogenic to Humans	OPP (12/16/99)

1 = CANCER CLASSIFICATION: Unless otherwise indicated, chemicals were evaluated and classified by either the Office of Pesticide Programs (OPP) Cancer Assessment Review Committee (CARC) or OPP Hazard Identification Assessment Review Committee (HIARC).

2= CRAVE/CAG: Chemicals were evaluated and classified by other Peer Review Committees within the US EPA: the Carcinogen Risk Assessment Validation Effort (CRAVE); or the Cancer Assessment Group (CAG).

4 米国における登録動物薬リスト

Sorted by Chemical/Subject, File Type

Chemical/Subject	File	VMF	Status	Holder
2-METHYL-3-TRIFLUOROMETHYL ANALINE	II	005223	Active	CENTRAL GLASS CO
3,5-DINITRO-O-TOLUAMIDE	II	003685	Inactive	ALPHARMA INC
3-(TRICHLOROETHENYL)ANILENE HYDROCHLORIDE	II	005647	Active	FINE ORGANICS
4-NITROPHENYLARSONIC ACID	II	005546	Active	ZHEJIANG HUANGYAN RONGYAO CHEMICAL FACTOR
ACEPROMAZINE MALEATE	II	003724	Inactive	BOEHRINGER INGELHEIM VETMEDICA INC
ACEPROMAZINE MALEATE	II	003725	Inactive	BOEHRINGER INGELHEIM VETMEDICA INC
ACEPROMAZINE MALEATE	II	005684	Active	HONEYWELL IROPHARM PLC
ADITOPRIM	II	005252	Inactive	ROCHE VITAMINS INC
ALBENDAZOLE	II	005282	Inactive	CIPLA LTD BOMBAY INDIA
ALBENDAZOLE	II	005560	Inactive	GUILIN PHARMACEUTICAL WORKS
ALTRENOGEST	II	005768	Active	DIOSYNTH BV
ALTRENOGEST	II	005776	Active	INDUSTRIALE CHIMICA S R L
AMITRAZ	II	005750	Active	BIOVECTRA DIAGNOSTIC CHEMICALS LIMITED
AMOXICILLIN TRIHYDRATE	II	005322	Inactive	FERMTEC INC
AMOXICILLIN TRIHYDRATE	II	005434	Active	PFIZER INC
AMOXICILLIN TRIHYDRATE	II	005595	Active	ACS DOBFAR SPA
AMPICILLIN ANHYDROUS	II	005125	Inactive	BOEHRINGER INGELHEIM VETMEDICA INC
AMPICILLIN TRIHYDRATE	II	005125	Inactive	BOEHRINGER INGELHEIM VETMEDICA INC
AMPICILLIN TRIHYDRATE	II	005319	Active	ACS DOBFAR SPA
AMPROLIUM	II	005529	Active	PHILIPP BROTHERS CHEMICALS INC
AMPROLIUM	II	005780	Active	ZHEJIANG JIUZHOU PHARMACEUTCAL CO LTD
APRAMYCIN	II	005143	Inactive	PURINA MILLS INC
APRAMYCIN	II	005186	Active	ELANCO ANIMAL HEALTH CO
APRAMYCIN	II	005210	Inactive	ELANCO ANIMAL HEALTH CO
APRAMYCIN SULFATE	II	005128	Inactive	MFA INC
ARSANILIC ACID	II	003561	Active	ALPHARMA INC
ARSANILIC ACID	II	005021	Inactive	FLEMING LABORATORIES INC
ARSANILIC ACID	II	005121	Inactive	NITROGENO INDUSTRIAL Y ALIMENTICIO
ATIPAMEZOLE HYDROCHLORIDE	II	005382	Active	ORION CORP
AUREOMYCIN	II	005095	Inactive	PURINA MILLS INC
AUREOMYCIN CHLORTETRACYCLINE	II	003584	Active	FORT DODGE ANIMAL HEALTH DIVISION OF WYETH
AVERMECTIN	II	005746	Active	ZHEJIANG HISUN PHARMACEUTICAL CO LTD
AVERMECTIN	II	005798	Active	ZHEJIANG BIO KANGYU PHARMACEUTICAL CO LTD

Chemical/Subject	File	VMF	Status	Holder
BACITRACIN METHYLENE DISALICYLATE	II	003663	Inactive	ALPHARMA INC
BACITRACIN METHYLENE DISALICYLATE	II	003683	Inactive	ALPHARMA INC
BACITRACIN METHYLENE DISALICYLATE	II	003771	Active	ALPHARMA INC
BACITRACIN METHYLENE DISALICYLATE	II	005752	Active	PENNFIELD OIL CO
BACITRACIN ZINC	II	003562	Active	ALPHARMA INC
BACITRACIN ZINC	II	003699	Active	KRKA PHARMACEUTICALS CO
BAMBERMYCINS	II	005583	Active	RIDLEY US HOLDINGS INC
BAMBERMYCINS	II	005631	Active	ADM ALLIANCE NUTRITION INC
BENZATHINE CLOXACILLIN	II	005435	Active	PFIZER INC
BLOATENZ PLUS	II	005390	Inactive	KLENZADE SERVICE ECOLAB RESEARCH CENTER
BOVINE SOMATOTROPIN	II	005030	Active	MONSANTO CO
BOVINE SOMATOTROPIN	II	005359	Inactive	FORT DODGE ANIMAL HEALTH DIVISION OF WYETH
BRONOPOL	II	005745	Active	BASF BIOCIDES LTD
BUFFERED SALINE SOLUTION	IV	005270	Inactive	ABBOTT LABORATORIES
BUSERELIN ACETATE	II	005066	Inactive	HOECHST ROUSSEL VET
CALCEIN	II	005779	Active	WESTERN CHEMICAL INC
CARBADOX	II	005248	Inactive	EGIS PHARMACEUTICALS
CARBAZOLE ESTER	II	005395	Inactive	ROCHE VITAMINS INC
CARBAZOLE ESTER	II	005520	Active	LEIRAS FINE CHEMICALS OY
CARMIDAZOLE	II	005123	Inactive	JANSSEN PHARMACEUTICA INC
CARPROFEN	II	005521	Active	LEIRAS FINE CHEMICALS OY
CARPROFEN	II	005625	Active	PROCOS SPA
CARPROFEN	II	005741	Active	COSMA SPA
CARPROFEN	II	005749	Active	JINAN JINDA PHARMACEUTICAL CHEMISTRY CO LI
CARPROFEN	II	005807	Active	CAMBREX PROFARMACO MILANO SRL
CEFTIOFUR	II	005706	Active	PHARMACIA AND UPJOHN CO A DIVISION OF PFIZ
CEFTIOFUR HYDROCHLORIDE	II	005173	Active	PHARMACIA AND UPJOHN CO A DIVISION OF PFIZ
CEFTIOFUR SODIUM	II	005810	Active	LUPIN LIMITED INDIA
CEFTIOFUR SODIUM	II	005812	Active	ACS DOBFAR SPA
CEFTIOFUR SODIUM	II	005814	Active	ORCHID CHEMICALS AND PHARMACEUTICALS LTD
CEFTIOFUR SODIUM	II	005815	Active	AUROBINDO PHARMA LTD INC
CEFTIOFUR SODIUM	II	005818	Active	AUROBINDO PHARMA LTD INC
CEFTIOFUR SODIUM	II	005821	Active	LUPIN LIMITED INDIA

Sorted by Chemical/Subject, File Type

Chemical/Subject	File	VMF	Status	Holder
CELLULOSE ACETATE	IV	005216	Inactive	FMC CORP
CELLULOSE ACETATE BUTYRATE	IV	005053	Inactive	FMC CORP
CELLULOSE TRIACETATE	IV	005052	Inactive	FMC CORP
CEPHAPIRIN BENZATHINE	II	005700	Active	ACS DOBFAR SPA
CEPHAPIRIN SODIUM	II	005551	Inactive	ACS DOBFAR SPA
CHLORAMPHENICOL	II	005831	Active	YANG ZHOU PHARMACEUTICAL CO LTD
CHLORHEXIDINE ACETATE	II	005159	Inactive	DELA CHEM INC
CHLORHEXIDINE ACETATE	II	005619	Inactive	ZENECA PHARMACEUTICALS
CHLORHEXIDINE DIGLUCONATE	II	003754	Inactive	BOEHRINGER INGELHEIM VETMEDICA INC
CHLORHEXIDINE HYDROCHLORIDE	II	005619	Inactive	ZENECA PHARMACEUTICALS
CHLORODIFLUOROQUINOLONE (CDFQ)	II	005488	Inactive	QUIMICA SINTETICA SA
CHLORODIFLUOROQUINOLONE (CDFQ)	II	005489	Active	ARCHIMICA SPA
CHLORTETRACYCLINE	II	003505	Active	FORT DODGE ANIMAL HEALTH DIVISION OF WYETH
CHLORTETRACYCLINE	II	003545	Inactive	FARMITALIA CARLO ERBA S P A
CHLORTETRACYCLINE	II	003610	Inactive	DIASPA SPA
CHLORTETRACYCLINE	II	003615	Active	CHEMAPOL LTD
CHLORTETRACYCLINE	II	005065	Inactive	IPC INTERNATIONAL PHARMACEUTICALS AND CHEM
CHLORTETRACYCLINE	II	005151	Inactive	KRKA PHARMACEUTICALS CO
CHLORTETRACYCLINE	II	005275	Active	FORT DODGE ANIMAL HEALTH DIVISION OF WYETH
CHLORTETRACYCLINE	II	005276	Inactive	FORT DODGE ANIMAL HEALTH DIVISION OF WYETH
CHLORTETRACYCLINE	II	005277	Inactive	AMERICAN CYANAMID CO TAIWAN CORP
CHLORTETRACYCLINE	II	005315	Active	EVERGREEN MILLS INC
CHLORTETRACYCLINE	II	005336	Inactive	KUN SHAN BIOCHEMICAL PROD FACTORY
CHLORTETRACYCLINE	II	005344	Active	ADM ALLIANCE NUTRITION INC
CHLORTETRACYCLINE	II	005405	Active	ALPHARMA INC
CHLORTETRACYCLINE	II	005406	Active	ALPHARMA INC
CHLORTETRACYCLINE	II	005468	Active	MONGOLIAN JIN HE
CHLORTETRACYCLINE	II	005472	Inactive	ALPHARMA INC
CHLORTETRACYCLINE	II	005532	Active	FUJIAN PUCHENG BIOCHEMISTRY CO LTD
CHLORTETRACYCLINE	II	005634	Active	FUZHOU ANIBIOTIC GROUP CORP
CHLORTETRACYCLINE	II	005661	Active	ZHUMADIAN HUAZHONG CHIA TAI CO LTD
CHLORTETRACYCLINE BISULFATE	II	005610	Active	FORT DODGE ANIMAL HEALTH DIVISION OF WYET
CHLORTETRACYCLINE CALCIUM	II	005444	Inactive	JINAN ENPING PHARMACEUTICAL CO LTD

Chemical/Subject	File	VMF	Status	Holder
CHLORTETRACYCLINE CALCIUM COMPLEX	II	003500	Inactive	LOHMANN TIERERNAHRUNG GMBH
CHLORTETRACYCLINE HYDROCHLORIDE	II	003561	Active	ALPHARMA INC
CHLORTETRACYCLINE HYDROCHLORIDE	II	003611	Inactive	DIASPA SPA
CHLORTETRACYCLINE HYDROCHLORIDE	II	005265	Active	GUANGZHOU PHARMACEUTICAL FACTORY - CHINA
CHLORTETRACYCLINE HYDROCHLORIDE	II	005658	Active	PENNFIELD OIL CO
CHLORTETRACYCLINE HYDROCHLORIDE [OBLETS]	II	005098	Inactive	PURINA MILLS INC
CHLORTETRACYCLINE [TYPE A MEDICATED ARTICLE]	II	005465	Active	ALPHARMA INC
CHORHEXIDINE GLUCONATE	II	005159	Inactive	DELA CHEM INC
CHORHEXIDINE HYDROCHLORIDE	II	005159	Inactive	DELA CHEM INC
CHROMIUM PICOLINATE	II	005455	Inactive	APPLIED SILICONE CORP
CLENBUTEROL HYDROCHLORIDE	II	005310	Inactive	BOEHRINGER INGELHEIM VETMEDICA INC
CLENBUTEROL HYDROCHLORIDE	II	005601	Active	BOEHRINGER INGELHEIM VETMEDICA INC
CLENBUTEROL HYDROCHLORIDE	II	005689	Active	BOEHRINGER INGELHEIM CHEMICALS INC
CLOPROSTENOL SODIUM SALT	II	005641	Active	NERAPHARM SPOL SRO
CLOR VI	II	005725	Active	LAPORTE FINE CHEMICALS
CLORSULON	II	005758	Active	ZHEJIANG HISUN PHARMACEUTICAL CO LTD
CLORSULON	II	005792	Active	ALCHYMARS SPA
CLORSULON PURE	II	005716	Active	RAYLO CHEMICALS INC
CLOXACILLIN BENZATHINE	II	005044	Active	BRISTOL-EUROPE CEBRIS FACILITIES
CLOXACILLIN BENZATHINE	II	005505	Inactive	ROFERM SPA
CLOXACILLIN BENZATHINE	II	005598	Active	ACS DOBFAR SPA
CLOXACILLIN SODIUM	II	005438	Active	PFIZER INC
CLOXACILLIN SODIUM	II	005596	Active	ACS DOBFAR SPA
COPPER NAPHTHENATE	II	003758	Inactive	BOEHRINGER INGELHEIM VETMEDICA INC
COPPER NAPHTHENATE	II	003842	Active	MOONEY CHEMICALS INC
COUMAPHOS	II	000645	Active	BAYER HEALTHCARE LLC ANIMAL HEALTH DIVISIC
CYCLOSPORIN	II	005474	Active	NOVARTIS PHARMACEUTICALS CORP
CYPERMETHRIN	II	005633	Active	FORT DODGE ANIMAL HEALTH DIVISION OF WYET
DDVP	II	005649	Active	AMVAC CHEMICAL CORP
DECOQUINATE	II	003394	Active	ALPHARMA INC
DESLORELIN	II	005463	Inactive	PEPTECH ANIMAL HEALTH PTY LTD
DESLORELIN	II	005478	Inactive	GENESIS INDUSTRIES INC
DESLORELIN	II	005787	Active	BACHEM CALIFORNIA

Sorted by Chemical/Subject, File Type

Chemical/Subject	File	VMF	Status	Holder
DESLORELIN ACETATE	II	005584	Active	BACHEM FEINCHEMIKALIEN AG
DETOMIDINE HYDROCHLORIDE	II	005105	Active	FERMION OY
DEXAMETHASONE	II	005539	Active	SCHERING PLOUGH ANIMAL HEALTH CORP
DEXAMETHASONE-21-ISO NICOTINATE	II	005622	Active	AVENTIS PHARMA SA
DEXMEDETOMIDINE HYDROCHLROIDE	II	005721	Active	FERMION OY
DIATHIAZINE IODIDE [TABLETS]	II	003892	Inactive	LUCHEM PHARMACEUTICALS INC
DIATOMACEOUS SILICA	IV	003331	Inactive	JOHNS MANVILLE
DICHLOROPHENE	II	005708	Active	PROCAPS SA
DICHLOROPHENE TOLUENE	II	003678	Inactive	BOEHRINGER INGELHEIM VETMEDICA INC
DICHLOROPHENE TOLUENE	IV	003726	Inactive	PHARMACAPS INC
DICHLORVOS	II	000516	Inactive	SHELL CHEMICAL CO
DICHLORVOS	II	003740	Inactive	DIAMOND SHAMROCK CORP
DICHLORVOS	II	005025	Inactive	DENKA CHEMIE BV
DIETHYLCARBAMAZINE CITRATE	II	003766	Inactive	REXOLIN CHEMICALS AB
DIETHYLCARBAMAZINE CITRATE	II	005096	Active	IROPHARM LTD
DIFLOXACIN HYDROCHLORIDE	II	005423	Active	PROFARMACO NOBEL S R L
DIFLOXACIN HYDROCHLORIDE	II	005441	Active	ABBOTT LABORATORIES
DIFLOXACIN HYDROCHLORIDE	II	005653	Inactive	QUIMICA SINTETICA SA
DIHYDROSTREPTOMYCIN SULFATE	II	005004	Active	PFIZER INC
DIHYDROSTREPTOMYCIN SULFATE	II	005189	Active	LONG MARCH PHARMACEUTICAL PLANT
DIHYDROSTREPTOMYCIN SULFATE	II	005358	Active	NORBROOK LABORATORIES LTD
DIHYDROSTREPTOMYCIN SULFATE	II	005761	Active	NORTH CHINA PHARMACEUTICAL HUASHENG CO LT
DINOPROST TROMETHAMINE	II	005602	Active	CHINOIN PHARMACEUTICAL AND CHEMICAL WORKS
DL CLOPROSTENOL SODIUM	II	005762	Active	INDUSTRIALE CHIMICA S R L
DOXYCYCLINE HYCLATE	II	005394	Inactive	SANDOZ GMBH
ELECTROLYTES	III	005517	Inactive	WINPAK TECHNOLOGIES INC
EMODEPSIDE	II	005785	Active	BAYER HEALTHCARE LLC ANIMAL HEALTH DIVISIC
ENROFLOXACIN	II	005513	Active	BAYER HEALTHCARE LLC ANIMAL HEALTH DIVISIC
EPSIPRANTEL	II	005361	Inactive	SMITHKLINE BEECHAM ANIMAL HEALTH
EPSIPRANTEL	II	005466	Active	PFIZER INC
EQUINE CHORIONIC GONADOTROPIN	II	005789	Active	ISTEKA EHF
ERYTHROMYCIN THIOCYANATE	II	005347	Active	ABBOTT LABORATORIES
ERYTHROMYCIN THIOCYANATE	II	005536	Active	ABBOTT LABORATORIES

Chemical/Subject	File	VMF	Status	Holder
ESTRADIOL	II	005271	Active	IVY LABORATORIES DIVISION OF IVY ANIMAL HE
ESTRADIOL BENZOATE	II	005293	Active	PR PHARMACEUTICALS INC
ESTRADIOL BENZOATE	II	005442	Active	FORT DODGE ANIMAL HEALTH DIVISION OF WYET
ESTRADIOL BENZOATE	II	005495	Active	PHARMACIA AND UPJOHN CO A DIVISION OF PFIZ
ESTRADIOL VALERATE	II	003567	Inactive	HYDRO MED SCIENCES DIV
ETHYLENE DIAMINE TETRAACETIC ACID COPPER DISODIUM S	II	005221	Inactive	EASTMAN KODAK CO
ETHYLENEDIAMINE DIHYDROIODIDE	II	003734	Inactive	MORTON SALT CO
ETHYLENEDIAMINE DIHYDROIODIDE	II	005200	Inactive	DEEPWATER INC
ETHYLENEDIAMINE DIHYDROIODIDE	III	003736	Inactive	CARGILL INC
ETORPHINE HYDROCHLORIDE	II	005570	Inactive	MACFARLAN SMITH LTD
FAMPHUR	II	005587	Active	DIXIE CHEMICAL CO INC
FEBANTEL	II	005626	Active	BAYER HEALTHCARE LLC ANIMAL HEALTH DIVISIC
FENBENDAZOLE	II	003753	Inactive	HOECHST ROUSSEL VET
FENBENDAZOLE	II	005272	Active	ADM ALLIANCE NUTRITION INC
FENBENDAZOLE	II	005274	Inactive	CIPLA LTD BOMBAY INDIA
FENBENDAZOLE	II	005302	Inactive	VIGORTONE AG PRODUCTS INC
FENBENDAZOLE	II	005548	Active	HANJIANG PHARMACEUTICAL FACTORY
FENBENDAZOLE	II	005627	Active	INTERVET INC
FENPROSTALENE	II	005091	Inactive	SYNTEX ANIMAL HEALTH DIVISION OF SYNTEX AG
FENTHION	II	003228	Active	BAYER HEALTHCARE LLC ANIMAL HEALTH DIVISIC
FENTHION	II	005375	Active	BAYER HEALTHCARE LLC ANIMAL HEALTH DIVISIC
FLORFENICOL	II	005481	Active	SCHERING PLOUGH ANIMAL HEALTH CORP
FLORFENICOL	II	005621	Active	SHANGHAI SCHERING PLOUGH PHARMACEUTICAL C
FLUMETHASONE	II	003659	Active	FORT DODGE ANIMAL HEALTH DIVISION OF WYET
FLUNIXIN MEGLUMINE	II	005354	Active	MTM CHEMICALS INC
FLUNIXIN MEGLUMINE	II	005730	Active	NORBROOK LABORATORIES LTD
FLUNIXIN MEGLUMINE	II	005828	Active	ZHEJIANG HISOAR PHARMACEUTICAL CO LTD
FLUOCINOLONE ACETONIDE	II	003579	Inactive	SYNTEX ANIMAL HEALTH DIVISION OF SYNTEX AG
FLUPIRTINE MALEATE	II	005769	Active	DEGUSSA AG
FORMALIN	II	005304	Inactive	GEORGIA PACIFIC CORP
FURAZOLIDONE	II	005169	Inactive	SPRAYON PRODUCTS
FURAZOLIDONE	II	005327	Active	FIRST SOUTHWEST PHARMACEUTICAL FACTORY CHI
FURAZOLIDONE	II	005611	Active	JINAN JINDA PHARMACEUTICAL CHEMISTRY CO LT

Sorted by Chemical/Subject, File Type

Chemical/Subject	File	VMF	Status	Holder
GENTAMICIN SULFATE	II	005469	Active	SCHERING PLOUGH ANIMAL HEALTH CORP
GLYCOSAMINOGLYCAN POLYSULFURIC ACID ESTER	II	003864	Active	ALFARMA ALTKIRCH
GONADORELIN ACETATE	II	005353	Inactive	AKZO PHARMA DIVISION
GONADORELIN ACETATE	II	005585	Inactive	ADVANCED CHEMTECH INC
GONADORELIN ACETATE	II	005709	Active	POLYPEPTIDE LABS INC
GONADORELIN ACETATE	II	005826	Active	BACHEM AG
GONADOTROPIN HYDROCHLORIDE	II	005722	Active	POLYPEPTIDE LABS INC
HALIFUGINONE HYDROBROMIDE	II	005035	Inactive	DANOCHEMO A/S
HETACILLIN POTASSIUM	II	005729	Active	ACS DOBFAR SPA
HISTOACRYL BLUE	II	003841	Inactive	UNIV OF ARIZONA
HYALURONIC SODIUM	II	005087	Inactive	FIDIA PHARMACEUTICAL CORP
HYGROMYCIN	II	005187	Inactive	ELANCO ANIMAL HEALTH CO
IRON DEXTRAN	II	003708	Inactive	PHARMACHEM LABS
IRON DEXTRAN	II	005022	Active	PHARMACOSMOS A/S
IRON DEXTRAN	II	005215	Inactive	CHEMDEX INC
IRON HYDROGENATED DEXTRAN	II	000336	Inactive	CHEMDEX INC SPARHAWK LABS
IVERMECTIN	II	005476	Active	MERCK AND CO INC
IVERMECTIN	II	005553	Active	ZHEJIANG HISUN PHARMACEUTICAL CO LTD
IVERMECTIN	II	005576	Active	LONG MARCH PHARMACEUTICAL PLANT
IVERMECTIN	II	005636	Active	HOVIONE SOCIEDADE QUIMICA SA
IVERMECTIN	II	005672	Active	CHEMSOURCE CORP
IVERMECTIN	II	005720	Active	QILO PHARMACEUTICAL GENERAL FACTORY
IVERMECTIN	II	005774	Active	AINO CO LTD NORTH CHINA PHARMACEUTICAL GRC
IVERMECTIN	II	005797	Active	ZHEJIANG KANGYU PHARMACEUTICAL CO LTD
KETAMINE HYDROCHLORIDE	II	005368	Inactive	NORCHIM
LAIDLOMYCIN	II	005243	Inactive	ABBOTT LABORATORIES
LAIDLOMYCIN PROPIONATE POTASSIUM SALT	II	005255	Active	ALPHARMA INC
LAIDLOMYCIN SODIUM SALT	II	005372	Inactive	ANTIBIOTICOS INC
LASALOCID	II	005283	Inactive	CARGILL INC
LASALOCID	II	005350	Active	CARGILL INC
LASALOCID	II	005363	Active	CARGILL INC
LASALOCID	II	005574	Inactive	CARGILL INC
LASALOCID	II	005592	Inactive	WESTWAY TRADING CORP

Chemical/Subject	File	VMF	Status	Holder
LASALOCID	II	005594	Active	CENEX LAND O LAKES
LASALOCID	II	005623	Inactive	SOUTHERN STATES COOP INC
LASALOCID	II	005630	Active	FARMLAND INDUSTRIES INC
LASALOCID	II	005642	Inactive	LAND O LAKES INC
LASALOCID SODIUM	II	005759	Active	ALPHARMA INC
LASIX GRANULE PACKET PACKAGE	IV	000397	Inactive	SHARP CORP
LEAD ACETATE	II	005007	Inactive	VETERINARSKI ZAVOD ZEMUN
LEVAMISOLE	II	003636	Active	FORT DODGE ANIMAL HEALTH DIVISION OF WYETH
LEVAMISOLE	II	005040	Active	FORT DODGE ANIMAL HEALTH DIVISION OF WYETH
LEVAMISOLE	II	005656	Active	ALCHYMARS SPA
LEVAMISOLE HYDROCHLORIDE	II	005152	Active	FORT DODGE ANIMAL HEALTH DIVISION OF WYETH
LEVAMISOLE HYDROCHLORIDE	II	005391	Active	INNOTECH INC
LEVAMISOLE HYDROCHLORIDE	II	005516	Active	FIRST SOUTHWEST PHARMACEUTICAL FACTORY CHI
LEVAMISOLE HYDROCHLORIDE	II	005575	Active	HANJIANG PHARMACEUTICAL FACTORY
LEVAMISOLE PHOSPHATE	II	005386	Active	GUILIN PHARMACEUTICAL WORKS
LEVAMISOLE PHOSPHATE	II	005516	Active	FIRST SOUTHWEST PHARMACEUTICAL FACTORY CHI
LEVAMISOLE PHOSPHATE	II	005612	Active	SHAANXI HANJIANG PHARMACEUTICAL LTD
LINCOMYCIN HYDROCHLORIDE	II	005819	Active	JIANGXI GUO YAO PHARMACEUTICAL LLC
LUPROSTIOL	II	005155	Inactive	MERCK AND CO INC
MANUFACTURE OF CH-35	III	005045	Inactive	ALLIED ADHESIVE CORP
MANUFACTURING OF BRIJ 35	IV	003030	Inactive	I C I AMERICAS INC
MARBOFLOXACIN	II	005604	Active	BAYER AG
MARBOFLOXACIN	II	005685	Active	FABBRICA ITALIANA SINTETICI
MED11-6382 SILICONE ELASTOMER	IV	005811	Active	NUSIL TECHNOLOGY
MEDETOMIDINE HYDROCHLORIDE	II	005150	Active	FERMION OY
MEDICATED FEED	II	003422	Inactive	SMITHKLINE BEECHAM ANIMAL HEALTH
MEDICATED FEED	II	003655	Inactive	CALOR AGRICULTURAL RESEARCH INC
MEDICATED FEED	II	003732	Inactive	HARDY SALT CO
MEDICATED FEED	II	003733	Inactive	LESLIE SALT CO
MEDICATED FEED	II	003749	Inactive	RALSTON PURINA CO
MEDICATED FEED	II	003816	Inactive	ALPHARMA INC
MEDICATED FEED	II	003843	Inactive	CARGILL INC
MEDICATED FEED	II	003855	Inactive	BIEGERT BROTHERS FERTILIZER AND FEED CO

Sorted by Chemical/Subject, File Type

Chemical/Subject	File	VMF	Status	Holder
MEDICATED FEED	II	003896	Inactive	ADM ANIMAL HEALTH AND NUTRITION
MEDICATED FEED	II	005026	Active	RIDLEY US HOLDINGS INC
MEDICATED FEED	II	005033	Inactive	PM AG PRODUCTS INC
MEDICATED FEED	II	005034	Inactive	FARMLAND INDUSTRIES INC
MEDICATED FEED	II	005036	Inactive	FOSTER COMMODITIES
MEDICATED FEED	II	005086	Inactive	PURINA MILLS INC
MEDICATED FEED	II	005099	Inactive	KAYDEE FEED CO
MEDICATED FEED	II	005190	Inactive	LIQUID FEED COMMODITIES INC
MEDICATED FEED	II	005196	Inactive	LOOMIX INC
MEDICATED FEED	II	005296	Active	ALPHARMA INC
MEDICATED FEED	II	005301	Active	ALPHARMA INC
MEDICATED FEED	II	005313	Inactive	CENTRAL SOYA CO INC
MEDICATED FEED	II	005318	Active	PFIZER INC
MEDICATED FEED	II	005332	Active	PFIZER INC
MEDICATED FEED	II	005355	Active	ADM ALLIANCE NUTRITION INC
MEDICATED FEED	II	005418	Active	ADM ALLIANCE NUTRITION INC
MEDICATED FEED	II	005493	Inactive	VIGORTONE AG PRODUCTS INC
MEDICATED FEED	II	005526	Active	PURINA MILLS INC
MEDICATED FEED	II	005540	Active	WESTWAY TRADING CORP
MEDICATED FEED	II	005567	Inactive	ADM ALLIANCE NUTRITION INC
MEDICATED FEED	II	005586	Inactive	ADM ALLIANCE NUTRITION INC
MEDICATED FEED	II	005605	Active	RIDLEY US HOLDINGS INC
MEDICATED FEED	II	005606	Inactive	EASTERN MINERALS INC
MELARSOMINE DIHYDROCHLORIDE	II	005470	Active	ABBOTT LABORATORIES
MELATONIN	II	005557	Inactive	HELSINN CHEMICALS SA
MELENGESTROL ACETATE	II	003875	Active	PHARMACIA AND UPJOHN CO A DIVISION OF PFIZ
MELENGESTROL ACETATE	II	005734	Active	BEIJING KEYIFENG BIOTECH DEVELOPMENT CO LI
MELENGESTROL ACETATE	II	005784	Active	CRYSTAL PHARMA SA
METHOXYFLURANE	II	003861	Inactive	BAXTER PHARMACEUTICAL PRODUCTS INC
METOMIDATE HYDROCHLORIDE	II	005256	Inactive	JANSSEN RESEARCH FOUNDATION
MILBEMYCIN OXIME	II	005225	Active	SANKYO LIFETECH CO LTD
MILBEMYCIN OXIME	II	005430	Inactive	RSR LABS
MONENSIN	II	003428	Inactive	AMERICAN FEED MANUFACTURERS ASSN INC

Chemical/Subject	File	VMF	Status	Holder
MONENSIN	II	003745	Active	ELANCO ANIMAL HEALTH CO
MONENSIN	II	005407	Inactive	ELANCO ANIMAL HEALTH CO
MONENSIN	II	005588	Active	ELANCO ANIMAL HEALTH CO
MONENSIN	II	005591	Inactive	WESTWAY TRADING CORP
MONENSIN	II	005669	Inactive	WESTWAY TRADING CORP
MONENSIN SODIUM	II	005679	Active	KRKA PHARMACEUTICALS CO
MONENSIN SODIUM	II	005680	Active	ELANCO ANIMAL HEALTH CO
MONTANIDE ISA 70 PHA	II	005682	Active	SEPPIC SA
MORANTEL TARTRATE	II	005193	Active	PFIZER INC
MOXIDECTIN	II	005446	Active	FORT DODGE ANIMAL HEALTH DIVISION OF WYETH
MOXIDECTIN	II	005451	Active	FORT DODGE ANIMAL HEALTH DIVISION OF WYETH
MOXIDECTIN	II	005519	Active	FORT DODGE ANIMAL HEALTH DIVISION OF WYETH
MOXIDECTIN	II	005528	Inactive	FORT DODGE ANIMAL HEALTH DIVISION OF WYETH
MOXIDECTIN (F-ALPHA)	II	005445	Inactive	FORT DODGE ANIMAL HEALTH DIVISION OF WYETH
MUCOSAL STARTER CULTURE MICROFLORA	II	005803	Active	CHR HANSEN INC
N-BUTYL CHLORIDE	II	003445	Inactive	R P SCHERER NORTH AMERICA
NAPROXEN	II	003573	Inactive	SYNTEX ANIMAL HEALTH DIVISION OF SYNTEX AG
NARASIN	II	005122	Active	ELANCO ANIMAL HEALTH CO
NEOMYCIN SULFATE	II	000270	Active	PFIZER INC
NEOMYCIN SULFATE	II	003369	Inactive	S B PENICK AND CO
NEOMYCIN SULFATE	II	005162	Active	PHARMACIA AND UPJOHN CO A DIVISION OF PFIZ
NEOMYCIN SULFATE	II	005371	Inactive	BIOGAL PHARMACEUTICAL WORKS LTD
NEOMYCIN SULFATE	II	005431	Active	LONG MARCH PHARMACEUTICAL PLANT
NEOMYCIN SULFATE	II	005718	Active	YICHANG SANXIA PHARMACEUTICAL CO LTD
NICARBAZIN	II	005082	Inactive	ELANCO ANIMAL HEALTH CO
NICARBAZIN	II	005492	Active	PLANALQUIMICA INDUSTRIAL LTDA OF BRAZIL
NICARBAZIN	II	005515	Active	PHILIPP BROTHERS CHEMICALS INC
NICARBAZIN	II	005558	Active	ELANCO ANIMAL HEALTH CO
NITROFURAZONE [OINTMENT]	II	003677	Inactive	BOEHRINGER INGELHEIM VETMEDICA INC
NORGESTOMET [IMPLANT]	II	003567	Inactive	HYDRO MED SCIENCES DIV
NYSTATIN	II	005597	Inactive	RESEARCH INSTITUTE OF ANTIBIOTICS AND BIOI
NYSTATIN MYCELIUM	II	005632	Active	GIST BROCADES ITALY SPA
OMEPRAZOLE	II	005629	Active	ASTRA MERCK

Chemical/Subject	File	VMF	Status	Holder
ORGOTEIN	II	003465	Inactive	WORTHINGTON BICHEMICAL CORP
OXFENDAZOLE	II	003691	Active	FORT DODGE ANIMAL HEALTH DIVISION OF WYET
OXFENDAZOLE	II	005666	Active	SHAANXI HANJIANG PHARMACEUTICAL LTD
OXOLINIC ACID	II	005220	Inactive	CHEMI SPA
OXYTETRACYCLINE	II	003590	Active	PFIZER INC
OXYTETRACYCLINE	II	005115	Inactive	ANSA ANTIBIOTIK VE ILAC HAMMADDELERI SANYI
OXYTETRACYCLINE	II	005257	Inactive	NORTH CHINA PHARMACEUTICAL CORP
OXYTETRACYCLINE	II	005678	Active	NORBROOK LABORATORIES LTD
OXYTETRACYCLINE	II	005744	Active	CHIFENG PHARMACEUTICAL GROUP CO LTD
OXYTETRACYCLINE	II	005747	Active	NORTH CHINA PHARMACEUTICAL GROUP CORP
OXYTETRACYCLINE DIHYDRATE	II	005674	Active	NEW CHEMIC US INC
OXYTETRACYCLINE DIHYDRATE	II	005824	Active	PFIZER INC
OXYTETRACYCLINE DODECYL QUATERNARY AMMONIUM SATL	II	005230	Inactive	MEDIMPEX NORTH AMERICA INC
OXYTETRACYCLINE HYDROCHLORIDE	II	003851	Inactive	BOEHRINGER INGELHEIM VETMEDICA INC
OXYTETRACYCLINE HYDROCHLORIDE	II	005426	Active	JIANGXI PHARMACEUTICAL FACTORY - CHINA
OXYTETRACYCLINE HYDROCHLORIDE	II	005696	Active	PENNFIELD OIL CO
OXYTETRACYCLINE HYDROCHLORIDE	II	005714	Active	NORBROOK LABORATORIES LTD
OXYTETRACYCLINE HYDROCHLORIDE	II	005743	Active	CHIFENG PHARMACEUTICAL GROUP CO LTD
OXYTETRACYCLINE HYDROCHLORIDE	II	005822	Active	JIANGXI GUO YAO PHARMACEUTICAL LLC
OXYTETRACYCLINE HYDROCHLORIDE	II	005833	Active	PFIZER INC
OXYTETRACYCLINE QUATERNARY SALT	II	003885	Active	PFIZER INC
OXYTOCIN	II	003686	Inactive	BOEHRINGER INGELHEIM VETMEDICA INC
OXYTOCIN	II	005411	Inactive	CARLBIOTECH LTD
OXYTOCIN	II	005657	Active	GDL INTERNATIONAL
PACKAGING MATERIALS	III	003423	Inactive	ROCHE VITAMINS INC
PACKAGING MATERIALS	III	005070	Inactive	ROBB CONTAINER CORP
PACKAGING OF PIPERAZINE PHOSPHATE MONOHYDRATE	III	003884	Inactive	A B S CORP
PENICILLIN DIHYDROSTREPTOMYCIN	II	003716	Inactive	MASTI KURE PRODUCTS CO
PENICILLIN G INTERMEDIATES	II	005317	Inactive	GLAXO INC
PENICILLIN G POTASSIUM	II	005763	Active	NORTH CHINA PHARMACEUTICAL CO LTD
PENICILLIN G PROCAINE	II	003561	Active	ALPHARMA INC
PENICILLIN G PROCAINE	II	003763	Inactive	E R SQUIBB AND SONS INC
PENICILLIN G PROCAINE	II	003880	Inactive	HOECHST ROUSSEL VET

Chemical/Subject	File	VMF	Status	Holder
PENICILLIN G PROCAINE	II	005084	Active	BIOCHEMIE DEUTSCHLAND GMBH
PENICILLIN G PROCAINE	II	005194	Active	FERSINA GIST BROCADES S A DE CV
PENICILLIN G PROCAINE	II	005342	Active	NORBROOK LABORATORIES LTD
PENICILLIN G PROCAINE	II	005564	Active	DONG FENG PHARMACEUTICAL FACTORY
PENICILLIN G PROCAINE	II	005581	Active	HEBEI HUARI PHARMACEUTICALS CO LTD
PENICILLIN G PROCAINE	II	005650	Active	HEBEI HUARI PHARMACEUTICALS CO LTD
PENICILLIN PROCAINE	II	005125	Inactive	BOEHRINGER INGELHEIM VETMEDICA INC
PENTOBARBITAL SODIUM	II	005727	Active	ORGANICHEM CORP
PHENOTHIAZINE	II	003746	Inactive	WEST AGRO CHEMICAL INC
PHENYLBUTAZONE	II	005510	Active	SHANGHAI MEDICINAL CORP NO 15 PHAR FACT
PHENYLBUTAZONE	II	005736	Active	GYMA LABS OF AMERICA INC
PHENYLBUTAZONE [MICROCAPS]	II	003706	Inactive	EURAND ITALIA
PIMOBENDAN	II	005793	Active	BOEHRINGER INGELHEIM PHARMA GMBH AND CO K
PIPERAZINE	II	005518	Active	UNION CARBIDE CORP
PIPERAZINE	II	005615	Inactive	AKZO NOBEL CHEMICALS INC
PIPERAZINE ADIPATE	II	005250	Inactive	REXOLIN CHEMICALS AB
PIPERAZINE CITRATE	II	003768	Inactive	KV PHARMACEUTICALS INC
PIPERAZINE CITRATE	II	005620	Inactive	AKZO NOBEL CHEMICALS INC
PIPERAZINE DIHYDROCHLORIDE	II	005009	Inactive	REXOLIN CHEMICALS AB
PIPERAZINE DIHYDROCHLORIDE	II	005227	Inactive	FLEMING LABORATORIES INC
PIPERAZINE DIHYDROCHLORIDE	II	005531	Inactive	AKZO NOBEL CHEMICALS INC
PIPERAZINE DIHYDROCHLORIDE	II	005620	Inactive	AKZO NOBEL CHEMICALS INC
PIPERAZINE MONOHYDROCHLORIDE	II	005620	Inactive	AKZO NOBEL CHEMICALS INC
PIPERAZINE PHOSPHATE	II	005251	Inactive	REXOLIN CHEMICALS AB
PIPERAZINE PHOSPHATE MONOHYDRATE	II	005006	Inactive	MIKART INC
PLASTIC CAPSULE	IV	005076	Inactive	ELANCO ANIMAL HEALTH CO
PLASTIC CAPSULE	IV	005101	Inactive	ELANCO ANIMAL HEALTH CO
PLEUROMULIN	II	003800	Active	SANDOZ GMBH
PLEUROMULIN	II	005771	Active	BC BIOCHEMIE GMBH
PLEUROMUTILIN	II	005754	Active	DIASPA SPA
POLY (LACTIDE-CO-GLYCOLIDE)	IV	005339	Active	ALKERMES CONTROLLED THERAPEUTICS INC II
POLYLACTIC POLYGLYCOLIC ACID	II	005163	Inactive	ELANCO ANIMAL HEALTH CO
POLYLACTIC/POLYGLYCOLIC ACID COPOLYMER	II	005077	Inactive	ELANCO ANIMAL HEALTH CO

Chemical/Subject	File	VMF	Status	Holder
POLYVINYLPYRROLIDONE	IV	000078	Inactive	INTERNATIONAL SPECIALTY PRODUCTS
PORCINE SOMATOTROPIN	II	005131	Inactive	AMGEN INC
PORCINE SOMATOTROPIN	II	005396	Inactive	MALLINCKRODT VETERINARY INC
POTASSIUM ALUM	II	005007	Inactive	VETERINARSKI ZAVOD ZEMUN
POTASSIUM PENICILLIN G	II	005125	Inactive	BOEHRINGER INGELHEIM VETMEDICA INC
POTASSIUM PENICILLIN V	II	005125	Inactive	BOEHRINGER INGELHEIM VETMEDICA INC
PRADOFLOXACIN	II	005834	Active	BAYER HEALTHCARE LLC ANIMAL HEALTH DIVISIC
PRAZIQUANTEL	II	005545	Inactive	HELM NEW YORK CHEMICAL CORP
PRAZIQUANTEL	II	005703	Active	PROCOS SPA
PRAZIQUANTEL	II	005713	Active	NANJING PHARMACEUTICAL FACTORY
PRAZIQUANTEL	II	005748	Active	ZHEJIANG HISUN PHARMACEUTICAL CO LTD
PRAZIQUANTEL	II	005770	Active	HANGZHOU MINSHENG PHARMACEUTICAL GROUP CO
PRIMIDONE	II	003730	Inactive	BOEHRINGER INGELHEIM VETMEDICA INC
PROPENTOFYLLINE	II	005683	Active	LABORATORIO CHIMICO INTERNAZIONALE SPA
PROPOFOL	II	005555	Active	ZENECA PHARMACEUTICALS
PROPYLENE GLYCOL	II	003744	Inactive	QUAKER OATS CO
PYRANTEL PAMOATE	II	005054	Active	PFIZER INC
PYRANTEL PAMOATE	II	005103	Active	PFIZER INC
PYRANTEL PAMOATE	II	005116	Active	HANGZHOU MINSHENG PHARMACEUTICAL GROUP CO
PYRANTEL PAMOATE	II	005205	Inactive	ORION CORP
PYRANTEL PAMOATE	II	005263	Active	COSMA SPA
PYRANTEL PAMOATE	II	005428	Inactive	IPCA LABORATORIES
PYRANTEL PAMOATE	II	005562	Active	MOEHS SA PRODUCTOS QUIMICOS
PYRANTEL TARTRATE	II	005449	Inactive	IPCA LABORATORIES
PYRANTEL TARTRATE	II	005496	Inactive	NEWPORT SYNTHESIS LTD
PYRANTEL TARTRATE	II	005578	Active	COSMA SPA
PYRANTEL TARTRATE	II	005675	Active	HANGZHOU MINSHENG PHARMACEUTICAL GROUP CO
PYRIPROXYFEN	II	005665	Active	SUMITOMO CHEMICAL CO LTD
RACTOPAMINE HYDROCHLORIDE	II	005182	Active	ELANCO ANIMAL HEALTH CO
RACTOPAMINE HYDROCHLORIDE	II	005680	Active	ELANCO ANIMAL HEALTH CO
RACTOPAMINE HYDROCHLORIDE	II	005723	Active	ELANCO ANIMAL HEALTH CO
RACTOPAMINE HYDROCHLORIDE [TYPE A MEDICATED ARTICLE	II	005477	Active	ELANCO ANIMAL HEALTH CO
ROBENIDINE HYDROCHLORIDE	II	005766	Active	HCH UQUIFA

Chemical/Subject	File	VMF	Status	Holder
ROMIFIDINE HYDROCHLORIDE	II	005654	Active	BOEHRINGER INGELHEIM VETMEDICA INC
ROXARSONE	II	005179	Inactive	NITROGENO INDUSTRIAL Y ALIMENTICIO
S-METHOPRENE	II	005717	Active	EGIS PHARMACEUTICALS
SALINOMYCIN	II	003791	Inactive	HOECHST AG FRANKFURT/MAIN HOCHST GERMANY
SALINOMYCIN	II	005337	Active	KAKEN PHARMACEUTICAL CO
SALINOMYCIN	II	005527	Active	DIASPA SOCIETA PER AZIONI
SALINOMYCIN	II	005579	Inactive	SHANDONG LUKANG PHARMACEUTICAL CO LTD
SALINOMYCIN	II	005737	Active	BIOTIKA
SALINOMYCIN	II	005832	Active	LUKANG SHELILE HEZE PHARMACEUTICAL CO LTD
SALINOMYCIN SODIUM	II	005401	Active	KRKA PHARMACEUTICALS CO
SARAFLOXACIN	II	005413	Active	ABBOTT LABORATORIES
SARAFLOXACIN HYDROCHLORIDE	II	005414	Active	ARCHIMICA SPA
SARAFLOXACIN HYDROCHLORIDE	II	005549	Inactive	ABBOTT LABORATORIES
SARAFLOXACIN HYDROCHLORIDE	II	005614	Inactive	QUIMICA SINTETICA SA
SELENIUM SULFIDE	II	003653	Inactive	NATIONAL PHARMACEUTICAL MFG CO
SELENIUM SULFIDE	II	005460	Active	ABBOTT LABORATORIES
SEMDURAMICIN SODIUM	II	005781	Active	PHIBRO ANIMAL HEALTH
SEVOFLURANE	II	005512	Inactive	CENTRAL GLASS CO
SODIUM HYALURONATE	II	005773	Active	MARUHA CORP
SODIUM HYALURONATE	II	005219	Inactive	Q P CORP
SODIUM HYALURONATE	II	005760	Active	MACLEOD PHARMACEUTICALS INC
SODIUM HYALURONATE	II	005782	Active	DIOSYNTH BV
SODIUM SALINOMYCIN	II	005808	Active	PHIBRO ANIMAL HEALTH
SODIUM SELENITE	II	005039	Inactive	JOHNSON MATTHEY CHEMICAL LTD
SODIUM SELENITE	II	005655	Active	RETORTE ULRICH SCHARRER GMBH
SODIUM SULFACHLORPYRIDAZINE	II	005788	Active	UNION QUIMICO FARMACEUTICA SA
SODIUM SULFAMERAZINE	II	005147	Inactive	CAROLINA ANIMAL CHEMICALS CO
SODIUM SULFAMETHAZINE	II	003715	Inactive	AMERICAN VETERINARY PRODUCTS INC
SODIUM SULFAMETHAZINE	II	005146	Inactive	CAROLINA ANIMAL CHEMICALS CO
SODIUM SULFAQUINOXALINE	II	005148	Inactive	CAROLINA ANIMAL CHEMICALS CO
SODIUM SULFAQUINOXALINE	II	005153	Inactive	CAROLINA ANIMAL CHEMICALS CO
SODIUM SULFATHIAZOLE SESQUIHYDARATE	II	005145	Inactive	CAROLINA ANIMAL CHEMICALS CO
SOMETRIBOVE ZINC	II	005735	Active	MONSANTO CO

Chemical/Subject	File	VMF	Status	Holder
SPECIFICATIONS & DIRECTIONS FOR TESTING RAW MATERI	IV	003424	Inactive	ROCHE VITAMINS INC
SPECTINOMYCIN DIHYDROCHLORIDE PENTAHYDRATE	II	005458	Active	ABBOTT LABORATORIES
SPECTINOMYCIN HYDROCHLORIDE	II	003759	Active	PHARMACIA AND UPJOHN CO A DIVISION OF PFIZ
SPECTINOMYCIN SULFATE	II	005790	Active	ZHEJIANG JINHUA CONBA BIO PHARM CO LTD
SPECTINOMYCIN SULFATE TETRAHYDRATE	II	005452	Inactive	ABBOTT LABORATORIES
SPINOSAD	II	005791	Active	DOW AGROSCIENCES LLC
STAINLESS STEEL GRIT PARTICULATES IRON & CHROMIUM	IV	003139	Active	MICRO TRACERS INC
STERILIZATION PROCESS VALIDATION	V	003147	Active	BAYER HEALTHCARE LLC ANIMAL HEALTH DIVISIC
STERILIZATION PROCESS VALIDATION	V	003547	Inactive	SYNTEX ANIMAL HEALTH DIVISION OF SYNTEX AG
STERILIZATION PROCESS VALIDATION	V	003576	Active	PFIZER INC
STERILIZATION PROCESS VALIDATION	V	003618	Active	ALPHARMA INC
STERILIZATION PROCESS VALIDATION	V	003656	Inactive	G C HANFORD MFG CO
STERILIZATION PROCESS VALIDATION	V	003743	Active	PFIZER INC
STERILIZATION PROCESS VALIDATION	V	003762	Inactive	MALLINCKRODT VETERINARY INC
STERILIZATION PROCESS VALIDATION	V	003786	Active	BOEHRINGER INGELHEIM VETMEDICA INC
STERILIZATION PROCESS VALIDATION	V	003794	Active	ROCHE VITAMINS INC
STERILIZATION PROCESS VALIDATION	V	003797	Active	VETERINARY LABORATORIES INC
STERILIZATION PROCESS VALIDATION	V	003829	Active	PHARMACOSMOS A/S
STERILIZATION PROCESS VALIDATION	V	003876	Active	PHARMACIA AND UPJOHN CO A DIVISION OF PFIZ
STERILIZATION PROCESS VALIDATION	V	005002	Inactive	ANTHONY PRODUCTS CO
STERILIZATION PROCESS VALIDATION	V	005075	Inactive	ORION CORP
STERILIZATION PROCESS VALIDATION	V	005079	Active	FIDIA S P A
STERILIZATION PROCESS VALIDATION	V	005109	Active	NORBROOK LABORATORIES LTD
STERILIZATION PROCESS VALIDATION	V	005110	Inactive	PHARMACEUTICALS BASICS INC
STERILIZATION PROCESS VALIDATION	V	005164	Inactive	BOEHRINGER INGELHEIM VETMEDICA INC
STERILIZATION PROCESS VALIDATION	V	005338	Inactive	TAYLOR PHARMACAL CO
STERILIZATION PROCESS VALIDATION	V	005349	Inactive	AMERICAN VETERINARY PRODUCTS INC
STERILIZATION PROCESS VALIDATION	V	005370	Inactive	CHINOIN PHARMACEUTICAL AND CHEMICAL WORKS
STERILIZATION PROCESS VALIDATION	V	005374	Inactive	GIST BROCADES FOOD INGREDIENTS INC
STERILIZATION PROCESS VALIDATION	V	005385	Active	PHOENIX SCIENTIFIC INC
STERILIZATION PROCESS VALIDATION	V	005415	Active	INTERVET INTERNATIONAL B V
STERILIZATION PROCESS VALIDATION	V	005420	Inactive	ORION CORP
STERILIZATION PROCESS VALIDATION	V	005427	Inactive	FIDIA PHARMACEUTICAL CORP

Chemical/Subject	File	VMF	Status	Holder
STERILIZATION PROCESS VALIDATION	V	005436	Active	ORION CORP
STERILIZATION PROCESS VALIDATION	V	005462	Inactive	PLIVA USA INC
STERILIZATION PROCESS VALIDATION	V	005473	Active	FORT DODGE ANIMAL HEALTH DIVISION OF WYET
STERILIZATION PROCESS VALIDATION	V	005566	Active	MERCK AND CO INC
STERILIZATION PROCESS VALIDATION	V	005600	Active	CROSS VETPHARM GROUP LTD
STERILIZATION PROCESS VALIDATION	V	005624	Active	FRESENIUS KABI NORGE AS
STERILIZATION PROCESS VALIDATION	V	005660	Active	NORBROOK LABORATORIES LTD
STERILIZATION PROCESS VALIDATION	V	005677	Active	SCHERING PLOUGH ANIMAL HEALTH CORP
STERILIZATION PROCESS VALIDATION	V	005687	Active	SCHERING PLOUGH ANIMAL HEALTH CORP
STERILIZATION PROCESS VALIDATION	V	005705	Active	PHARMACIA AND UPJOHN CO A DIVISION OF PFIZ
STERILIZATION PROCESS VALIDATION	V	005711	Active	WEST PHARMACEUTICAL SERVICES
STERILIZATION PROCESS VALIDATION	V	005726	Active	PHOENIX SCIENTIFIC INC
STERILIZATION PROCESS VALIDATION	V	005742	Active	INTERVET INTERNATIONAL GMBH
STERILIZATION PROCESS VALIDATION	V	005777	Active	ALTANA INC
STERILIZATION PROCESS VALIDATION	V	005778	Active	MED PHARMEX INC
STERILIZATION PROCESS VALIDATION	V	005794	Active	INTERVET INTERNATIONAL GMBH
STERILIZATION PROCESS VALIDATION	V	005809	Active	CEPHAZONE PHARMA LLC
STERILIZATION PROCESS VALIDATION	V	005827	Active	ANTIBOTICS DO BRASIL LTDA
STREPTOMYCIN SULFATE	II	005284	Inactive	CONTEMPORARY PRODUCTS INC
STREPTOMYCIN SULFATE	II	005580	Inactive	SHANDONG LUKANG PHARMACEUTICAL CO LTD
STRIP PACKING OF TABLETS & CAPSULES	III	003890	Inactive	STRIP PACK CO
STRONTIUM CHLORIDE HEXAHYDRATE	II	005688	Active	CATER CHEMICALS CORP
SULFADIAZINE	II	005702	Active	SOUTHWEST SYNTHETIC PHARMACEUTICAL GENERAL
SULFADIMETHOXINE	II	005565	Inactive	GUANGDONG PHARMACEUTICAL FACTORY
SULFAMERAZINE SODIUM	II	005676	Active	SHANGHAI SUNVE PHARMACEUTICAL CO LTD
SULFAMETHAZINE	II	003249	Inactive	MEDIMPEX NORTH AMERICA INC
SULFAMETHAZINE	II	003561	Active	ALPHARMA INC
SULFAMETHAZINE	II	003620	Inactive	PLIVA USA INC
SULFAMETHAZINE	II	003764	Inactive	FORT DODGE ANIMAL HEALTH DIVISION OF WYETH
SULFAMETHAZINE	II	003866	Active	BEIJING SECOND PHARMACEUTICAL FACTORY
SULFAMETHAZINE	II	005008	Active	ELANCO ANIMAL HEALTH CO
SULFAMETHAZINE	II	005093	Inactive	PURINA MILLS INC
SULFAMETHAZINE	II	005113	Active	SOUTHWEST SYNTHETIC PHARMACEUTICAL GENERAL

Chemical/Subject	File	VMF	Status	Holder
SULFAMETHAZINE AND SULFAMETHAZINE SODIUM	II	005161	Inactive	GUANGDONG PHARMACEUTICAL FACTORY
SULFAMETHAZINE BISULFATE	II	005491	Active	FORT DODGE ANIMAL HEALTH DIVISION OF WYETH
SULFAMETHAZINE BISULFATE MONOHYDRATE	II	005710	Active	PFANSTIEHL LABS INC
SULFAMETHAZINE SODIUM	II	005670	Active	SOUTHWEST SYNTHETIC PHARMACEUTICAL GENERAL
SULFAQUINOXALINE	II	005756	Active	SHANGHAI SUNVE PHARMACEUTICAL CO LTD
SULFAQUINOXALINE SODIUM	II	005757	Active	SHANGHAI SUNVE PHARMACEUTICAL CO LTD
SULFATHIAZOLE SODIUM	II	003772	Inactive	HELM NEW YORK CHEMICAL CORP
TANOMASTAT	II	005732	Active	BAYER HEALTHCARE LLC ANIMAL HEALTH DIVISIC
TEPOXALIN	II	005701	Active	SEAC CHIMIE FINE
TESTOSTERONE PROPIONATE	II	005561	Active	FORT DODGE ANIMAL HEALTH DIVISION OF WYET
TETRACYCLINE HYDROCHLORIDE	II	005719	Active	NINGXIA PHARMACEUTICAL FACTORY
TETRACYCLINE HYDROCHLORIDE [OBLETS]	II	005094	Inactive	PURINA MILLS INC
THIOSTREPTON	II	003333	Inactive	E R SQUIBB AND SONS INC
THIOSTREPTON	II	005129	Inactive	CALBIOCHEM NOVABIOCHEM INT
THIOSTREPTON	II	005508	Active	DUMEX ALPHARMA AS
THIOSTREPTON	II	005698	Active	ASAHI CHEMICAL INDUSTRY CO LTD
THIOSTREPTON	II	005699	Active	JOKO PHARMACEUTICALS CO LTD
TIAMULIN	II	005681	Active	BIOCHEMIE SPA
TIAMULIN HYDROGEN FUMARATE	II	005388	Inactive	GIST BROCADES ITALY SPA OF CAPUA
TIAMULIN HYDROGEN FUMARATE	II	005715	Active	BIOCHEMIE SPA
TIAMULIN HYDROGEN FUMARATE	II	005820	Active	BIOVET JOINT STOCK CO
TILETAMINE HYDROCHLORIDE	II	005297	Active	NORCHIM
TILMICOSIN	II	005260	Active	ELANCO ANIMAL HEALTH CO
TOLAZINE HYDROCHLORIDE	II	005764	Active	GREAT LAKES FINE CHEMICALS HOLYWELL
TOLUENE	II	005708	Active	PROCAPS SA
TRENBOLONE ACETATE	II	005443	Active	FORT DODGE ANIMAL HEALTH DIVISION OF WYET
TRENBOLONE ACETATE	II	005533	Active	PHARMACIA AND UPJOHN CO A DIVISION OF PFIZ
TRENBOLONE ACETATE	II	005648	Active	CLEMSON UNIV
TRENBOLONE ACETATE	II	005767	Active	DIOSYNTH BV
TRIAMCINOLONE ACETONIDE	II	003676	Inactive	E R SQUIBB AND SONS INC
TRIBASIC CALCIUM PHOSPHATE GRANULAR MFG	IV	005017	Inactive	STAUFFER CHEMICAL CO
TRICHLORFON	II	005379	Active	BAYER HEALTHCARE LLC ANIMAL HEALTH DIVISIC
TRIMETHOPRIM	II	005177	Inactive	GUANGDONG PHARMACEUTICAL FACTORY

Chemical/Subject	File	VMF	Status	Holder
TRIPELENNAMINE HYDROCHLORIDE	II	005733	Active	SCHUTZ AND CO
TYLOSIN	II	000382	Active	ELANCO ANIMAL HEALTH CO
TYLOSIN	II	005242	Active	ELANCO ANIMAL HEALTH CO
TYLOSIN	II	005571	Active	ANTIBIOTIC CO
TYLOSIN	II	005668	Inactive	WESTWAY TRADING CORP
TYLOSIN	II	005669	Inactive	WESTWAY TRADING CORP
TYLOSIN BASE	II	005037	Active	TRADE INDUSTRIAL CORP PHARMACHIM
TYLOSIN BASE	II	005817	Active	BIOVET JOINT STOCK CO
TYLOSIN PHOSPHATE	II	005340	Inactive	BOEHRINGER INGELHEIM VETMEDICA INC
TYLOSIN PHOSPHATE	II	005373	Inactive	ANTIBIOTICOS INC
TYLOSIN PHOSPHATE	II	005680	Active	ELANCO ANIMAL HEALTH CO
TYLOSIN PHOSPHATE	II	005799	Active	BIOVET JOINT STOCK CO
TYLOSIN TARTRATE	II	005690	Active	BIOVET JOINT STOCK CO
TYLOSIN TARTRATE	II	005712	Active	BALKANPHARMA RAZGRAD AD
TYLOSIN TARTRATE	II	005800	Active	BIOVET JOINT STOCK CO
TYLOSIN TARTRATE	II	005801	Active	XIAN HENGTONG GUANGHUA PHARMACEUTICAL CO L
TYLOSIN TARTRATE	II	005802	Active	BIOVET JOINT STOCK CO
TYLOSIN [INJECTION]	II	003770	Inactive	BOEHRINGER INGELHEIM VETMEDICA INC
ULTRAMID A3K	III	005281	Active	BASF AKTIENGESELLSCHAFT
VALNEMULIN	II	005691	Active	BIOCHEMIE GMBH
XYLAZINE	II	005067	Active	PALMER RESEARCH
XYLAZINE	II	005203	Inactive	EAGLE PICHER INDUSTRIES INC
XYLAZINE	II	005211	Active	CHEMSYN SCIENCE LABS
XYLAZINE HYDROCHLORIDE	II	005188	Inactive	BACHEM FEINCHEMIKALIEN AG
ZEARALENONE	II	005775	Active	SHANGHAI ZONGHUA PHARMACEUTICAL FACTORY
ZERANOL	II	005724	Active	CHEMAGIS LTD
ZERANOL	II	005751	Active	ZHEJIANG HISUN PHARMACEUTICAL CO LTD
ZILPATEROL HYDROCHLORIDE	II	005772	Active	LONZA LTD
ZOLAZEPAM HYDROCHLORIDE	II	005298	Active	NORCHIM
	III	005552	Active	VITRO ENVASES
	III	005635	Active	MUNNERSTADTER GLASWARENFABRIK GMBH

5 EUにおける登録農薬リスト（生物農薬は除く）

（EC理事会指令 91/414/EEC Annex I）

2005年5月18日現在

▼M22

ANNEX I

ACTIVE SUBSTANCES AUTHORISED FOR USE IN PLANT PROTECTION PRODUCTS

General provisions applying to all substances listed in this Annex:

For the implementation of the uniform principles of Annex VI in relation to each substance, the conclusions of the review report on it, and in particular the Appendices I and II thereof, as finalised in the Standing Committee on Plant Health on the date indicated under 'specific provisions' for that substance shall be taken into account.

Member States shall keep available all review reports (except for confidential information within the meaning of Article 14 of the Directive) for consultation by any interested parties or shall make it available to them on specific request.

Number	Common name, identification numbers	IUPAC name	Purity (1)	Entry into force	Expiration of inclusion	Specific provisions
1	Imazalil CAS No 73790-28-0, 35554-44-0 CIPAC No 335	(±)-1-(β-allyloxy-2,4-dichlorophenylethyl)imidazole or (±)-allyl 1-(2,4-dichlorophenyl)-2-imidazol-1-ylethyl ether	975 g/kg	1.1.1999	31.12.2008	Only uses as fungicide may be authorised For the following uses the following particular conditions apply: — post harvest fruit, vegetable and potato treatments may only be authorised when an appropriate decontamination system is available or a risk assessment has demonstrated to the authorising Member State that the discharge of the treatment solution does not have an unacceptable risk to the environment and in particular to aquatic organisms, — post harvest treatment of potatoes may only be authorised when a risk assessment has demonstrated to the authorising Member State that the discharge of the processing waste from treated potatoes does not have an unacceptable risk to aquatic organisms, — outdoor foliar uses may only be authorised when a risk assessment has demonstrated to the authorising Member State that the use has no unacceptable effects on human and animal health and the environment Date of Standing Committee on Plant Health at which the review report was finalised: 11.7.1997.
2	Azoxystrobin CAS No 131860-33-8 CIPAC No 571	Methyl (E)-2-{2[6-(2-cyanophenoxy)pyrimidin-4-yloxy] phenyl}-3-methoxyacrylate	930 g/kg (Z isomer max. 25 g/kg)	1.7.1998	1.7.2008	Only uses as fungicide may be authorised In the decision-making according to the uniform principles, particular attention should be given to the impact on aquatic organisms. Authorisation conditions should include appropriate risk mitigation measures Date of Standing Committee on Plant Health at which the review report was finalised: 22.4.1998

▼M22

Number	Common name, identification numbers	IUPAC name	Purity (1)	Entry into force	Expiration of inclusion	Specific provisions
3	Kresoxim-methyl CAS No 143390-89-0 CIPAC No 568	Methyl (E)-2-methoxyimino-2-[2-(o-tolyloxymethyl) phenyl] acetate	910 g/kg	1.2.1999	31.1.2009	Only used as fungicide may be authorised In their decision-making according to the uniform principles, Member States shall pay particular attention to the protection of groundwater under vulnerable conditions Date of Standing Committee on Plant Health at which the review report was finalised: 16.10.1998
4	Spiroxamine CAS No 1181134-30-8 CIPAC No 572	(8-tert-Butyl-1,4-dioxaspiro [4.5] decan-2-ylmethyl)-ethyl-propylamine	940 g/kg (diastereomers A and B combined)	1.9.1999	1.9.2009	Only uses as a fungicide may be authorised In their decision-making according to the uniform principles, Member States: — must pay particular attention to operator safety and must ensure that the conditions of authorisation include appropriate protective measures, and — must pay particular attention to the impact on aquatic organisms and must ensure that the conditions of authorisation include, where appropriate, risk mitigation measures Date of Standing Committee on Plant Health at which the review report was finalised: 12.5.1999
5	Azimsulfuron CAS No 120162-55-2 CIPAC No 584	1-(4,6-dimethoxypyrimidin-2-yl)-3-[1-methyl-4-(2-methyl-2H-tetrazol-5-yl)-pyrazol-5-ylsulfonyl]-urea.	980 g/kg	1.10.1999	1.10.2009	Only uses as herbicide may be authorised Aerial application may not be authorised In their decision making according to the uniform principles, Member States must pay particular attention to the impact on aquatic organisms and terrestrial non-target plants and must ensure that the conditions of authorisation include, where appropriate, risk mitigation measures (e. g. in rice cultivation minimum holding periods for water prior to discharge) Date of Standing Committee on Plant Health at which the review report was finalised: 2.7.1999
6	Fluroxypyr CAS No 69377-81-7 CIPAC No 431	4-amino-3,5-dichloro-6-fluoro-2-pyridyloxyacetic acid	950 g/kg	1.12.2000	30.11.2010	Only uses as herbicide may be authorised In their decision-making according to the uniform principles, Member States: — shall take into account the additional information requested in point 7 of the review report, — must pay particular attention to the protection of groundwater, — must pay particular attention to the impact on aquatic organisms and must ensure that the conditions of authorisation include, where appropriate, risk mitigation measures Member States shall inform the Commission if the requested additional trials and information as outlined in point 7 of the review report were not submitted by 1.12.2000 Date of Standing Committee on Plant Health at which the review report was finalised: 30.11.1999

▼M22

Number	Common name, identification numbers	IUPAC name	Purity (1)	Entry into force	Expiration of inclusion	Specific provisions
7	Metsulfuron-methyl CAS No 74223-64-6 EEC No 441	Methyl-2-(4-methoxy-6-methyl-1,3,5,-triazin-2-ylcarbamoylsulfamoyl)-benzoate	960 g/kg	1.7.2001	30.6.2011	Only uses as herbicide may be authorised In their decision making according to the uniform principles, Member States: — must pay particular attention to the protection of groundwater, — must pay particular attention to the impact on aquatic organisms and must ensure that the conditions of authorisation include, where appropriate, risk mitigation measures Date of Standing Committee on Plant Health at which the review report was finalised: 16.6.2000
8	Prohexadione-calcium CAS No 127277-53-6 CIPAC No 567	Calcium 3,5-dioxo-4-propionylcyclohexane-carboxylate	890 g/kg	1.10.2000	1.10.2010	Only uses as plant growth regulator may be authorised Date of Standing Committee on Plant Health at which the review report was finalised: 16.6.2000
9	Triasulfuron CAS No 82097-50-5 CIPAC No 480	1-[2-(2-chloroethoxy)-phenylsulfonyl]-3-(4-methoxy-6-methyl-1,3,5-triazin-2-yl)urea	940 g/kg	1.8.2001	31.7.2011	Only uses as herbicide may be authorised In their decision making according to the uniform principles, Member States: — must pay particular attention to the protection of groundwater, — must pay particular attention to the impact on aquatic organisms and must ensure that the conditions of authorisation include, where appropriate, risk mitigation measures Date of Standing Committee on Plant Health at which the review report was finalised: 13.7.2000
10	Esfenvalerate CAS No 66230-04-4 CIPAC No 481	(S)-α-Cyano-3-phenoxy-benzyl-(S)-2-(4-chloro-phenyl)-3-methylbutyrate	830 g/kg	1.8.2001	31.7.2011	Only uses as insecticide may be authorised In their decision making according to the uniform principles, Member States: — must pay particular attention to the potential impact on aquatic organisms and non-target arthropods and must ensure that the conditions of authorisation include, where appropriate, risk mitigation measures Date of Standing Committee on Plant Health at which the review report was finalised: 13.7.2000
11	Bentazone CAS No 25057-89-0 CIPAC No 366	3-isopropyl-(1H)-2,1,3-benzothiadiazin-4-(3H)-one-2,2-dioxide	960 g/kg	1.8.2001	31.7.2011	Only uses as herbicide may be authorised In their decision-making according to the uniform principles, Member States must pay particular attention to the protection of groundwater Date of Standing Committee on Plant Health at which the review report was finalised: 13.7.2000

▼M22

Number	Common name, identification numbers	IUPAC name	Purity (1)	Entry into force	Expiration of inclusion	Specific provisions
12	Lambda-cyhalothrin CAS No 91465-08-6 CIPAC No 463	A 1:1 mixture of: (S)-α-cyano-3-phenoxybenzyl (Z)-(1R,3R)-3-(2-chloro-3,3,3-trifluoropropenyl)-2,2-dimethylcyclopropanecarboxylate, and (R)-α-cyano-3-phenoxybenzyl (Z)-(1S,3S)-3-(2-chloro-3,3,3-trifluoropropenyl)-2,2-dimethylcyclopropanecarboxylate	810 g/kg	1.1.2002	31.12.2011	Only uses as insecticide may be authorised In their decision-making according to the uniform principles, Member States: — must pay particular attention to operator safety, — must pay particular attention to the potential impact on aquatic organisms and non-target arthropods including bees and must ensure that the conditions of authorisation include, where appropriate, risk mitigation measures, — must pay particular attention to the residues in food and especially the acute effects thereof Date of Standing Committee on Plant Health at which the review report was finalised: 19.10.2000
▼M24 13	Fenhexamid CAS No 126833-17-8 CIPAC No 603	N-(2,3-dichloro-4-hydroxyphenyl)-1-methylcyclohexanecarboxamide	≥ 950 g/kg (2)	1 June 2001	31 May 2011	Only uses as a fungicide may be authorised. In decision making according to the Uniform Principles Member States must pay particular attention to the potential impact on aquatic organisms and must ensure that the conditions of authorisation include, where appropriate, risk mitigation measures. Date of Standing Committee on Plant Health at which the review report was finalised: 19 October 2000
▼M23 14	Amitrole CAS No 61-82-5 CIPAC No 90	H-[1,2,4]-triazole-3-ylamine	900 g/kg	1.1.2002	31.12.2011	Only uses as herbicide may be authorised For the implementation of the uniform principles of Annex VI, the conclusions of the review report on amitrole, and in particular Appendices I and II thereof, as finalised in the Standing Committee on Plant Health on 12 December 2000 shall be taken into account. In this overall assessment Member States: — must pay particular attention to the protection of operators — must pay particular attention to the protection of the groundwater in vulnerable areas, in particular with respect to non-crop uses — must pay particular attention to the protection of beneficial arthropods — must pay particular attention to the protection of birds and wild mammals. Use of amitrole during the breeding season may only be authorised when an appropriate risk assessment has demonstrated that there is no unacceptable impact and when the conditions of authorisation include, where appropriate, risk mitigation measures

▼M23

Number	Common name, identification numbers	IUPAC name	Purity (1)	Entry into force	Expiration of inclusion	Specific provisions
15	Diquat CAS No 2764-72-9 (ion), 85-00-7 (dibromide) CIPAC No 55	9,10-Dihydro-8a,10a-diazoniaphenanthrene ion (dibromide)	950 g/kg	1.1.2002	31.12.2011	On the basis of currently available information, only uses as terrestrial herbicide and desiccant may be authorised. Uses in aquatic weed control shall not be authorised For the implementation of the uniform principles of Annex VI, the conclusions of the review report on diquat, and in particular Appendices I and II thereof, as finalised in the Standing Committee on Plant Health on 12 December 2000 shall be taken into account. In this overall assessment Member States: — must pay particular attention to the potential impact on aquatic organisms and must ensure that the conditions of authorisation include, where appropriate, risk mitigation measures — must pay particular attention to operator safety as related to non-professional use and must ensure that the conditions of authorisation include, where appropriate, risk mitigation measures
16	Pyridate CAS No 55512-33.9 CIPAC No 447	6-Chloro-3-phenylpyridazin-4-yl S-octyl thiocarbonate	900 g/kg	1.1.2002	31.12.2011	Only uses as herbicide may be authorised For the implementation of the uniform priciples of Annex VI, the conclusions of the review report on pyridate, and in particular Appendices I and II thereof, as finalised in the Standing Committee on Plant Health on 12 December 2000 shall be taken into account. In this overall assessment Member States: — must pay particular attention to the protection of groundwater — must pay particular attention to the potential impact on aquatic organisms and must ensure that the conditions of authorisation include, where appropriate, risk mitigation measures
17	Thiabendazole CAS No 148-79-8 CIPAC No 323	2-Thiazol-4-yl-1H-benzimidazole	985 g/kg	1.1.2002	31.12.2011	Only uses as fungicide may be authorised. Foliar spray applications shall not be authorised For the implementation of the uniform priciples of Annex VI, the conclusions of the review report on thiabendazole, and in particular Appendices I and II thereof, as finalised in the Standing Committee on Plant Health on 12 December 2000 shall be taken into account. In this overall assessment Member States: — must pay particular attention to the protection of aquatic and sediment-dwelling organisms and must ensure that the conditions of authorisation include, where appropriate, risk mitigation measures Suitable risk mitigation measures (e.g. depuration with diatom earth or activated carbon) have to be implemented to protect surface waters from unacceptable levels of contamination via wastewater

▼M26

Number	Common name, identification numbers	IUPAC name	Purity (1)	Entry into force	Expiration of inclusion	Specific provisions
18	Paecilomyces fumosoroseus Apopka strain 97, PFR 97 or CG 170, ATCC20874	Not applicable	The absence of secondary metabolites should be checked in each fermentation broth by HPLC	1 July 2001	30 June 2011	Only uses as an insecticide may be authorised Each fermentation broth should be checked by HPLC to ensure that no secondary metabolites are present Date of Standing Committee on Plant Health at which the review report was finalised: 27 April 2001
▼M27 19	DPX KE 459 (flupyrsulfuron-methyl) CAS No 144740-54-5 CIPAC No 577	2-(4,6-dimethoxypyrimidin-2-ylcarbamoylsulfamoyl)-6-trifluromethylnicotinate monosodium salt	903 g/kg (3)	1 July 2001	30 June 2011	Only uses as a herbicide may be authorised. In decision-making according to the Uniform Principles Member States must pay particular attention to the protection of groundwater. Date of Standing Committee on Plant Health at which the review report was finalised: 27 April 2001.
▼M28 20	Acibenzolar-s-methyl CAS No 135158-54-2 CIPAC No 597	Benzo[1,2,3]thiadiazole-7-carbothioic acid S-methyl ester	970 g/kg	1 November 2001	31 October 2011	Only uses as a plant activator may be authorised. Date of Standing Committee on Plant Health at which the review report was finalised: 29 June 2001.
21	Cyclanilide CAS No 113136-77-9 CIPAC No 586	Not available	960 g/kg	1 November 2001	31 October 2011	Only uses as a plant growth regulator may be authorised. The maximum content of the impurity 2,4-dichloroaniline (2,4-DCA) in the active substance as manufactured should be 1 g/kg. Date of Standing Committee on Plant Health at which the review report was finalised: 29 June 2001.
22	Ferric phosphate CAS No 10045-86-0 CIPAC No 629	Ferric phosphate	990 g/kg	1 November 2001	31 October 2011	Only uses as a molluscicide may be authorised. Date of Standing Committee on Plant Health at which the review report was finalised: 29 June 2001
23	Pymetrozine CAS No 123312-89-0 CIPAC No 593	(*E*)-6-methyl-4-[(pyridin-3-ylmetylene)amino]-4,5-dihydro-2H-[1,2,4]-triazin-3 one	950 g/kg	1 November 2001	31 October 2011	Only uses as an insecticide may be authorised. In decision-making according to the uniform principles Member States must pay particular attention to the protection of aquatic organisms. Date of Standing Committee on Plant Health at which the review report was finalised: 29 June 2001.

▼M28

Number	Common name, identification numbers	IUPAC name	Purity (1)	Entry into force	Expiration of inclusion	Specific provisions
24	Pyraflufen-ethyl CAS No 129630-19-9 CIPAC No 605	Ethyl-2-chloro-5-(4-chloro-5-difluoro-methoxy-1-mhypyrazol-3-yl)-4-fluorophenoxya-cetate	956 g/kg	1 November 2001	31 October 2011	Only uses as a herbicide may be authorised. In decision-making according to the uniform principles Member States must pay particular attention to the protection of algae and aquatic plants and should apply, where appropriate, risk mitigation measures. Date of Standing Committee on Plant Health at which the review report was finalised: 29 June 2001.
▼M29 25	Glyphosate CAS No 1071-83-6 CIPAC No 284	N-(phosphonomethyl)-glycin	950 g/kg	1 July 2002	30 June 2012	Only uses as herbicide may be authorised For the implementation of the uniform principles of Annex VI, the conclusions of the review report on glyphosate, and in particular Appendices I and II thereof, as finalised in the Standing Committee on Plant Health on 29 June 2001 shall be taken into account. In this overall assessment Member States: — must pay particular attention to the protection of the groundwater in vulnerable areas, in particular with respect to non-crops uses
26	Thifensulfuron-methyl CAS No 79277-27-3 CIPAC No 452	Methyl 3-(4-methoxy-6-methyl-1,3,5-triazin-2-ylcarbamoyl-sulfamoyl) thiophene-2-carboxylate	960 g/kg	1 July 2002	30 June 2012	Only uses as herbicide may be authorised. For the implementation of the uniform principles of Annex VI, the conclusions of the review report on thifensulfuron-methyl, and in particular Appendices I and II thereof, as finalised in the Standing Committee on Plant Health on 29 June 2001 shall be taken into account. In this overall assessment Member States: — must pay particular attention to the protection of groundwater, — must pay particular attention to the impact on aquatic plants and must ensure that the conditions of authorisation include, where appropriate, risk mitigation measures
▼M30 27	2,4-D CAS No 94-75-7 CIPAC No 1	(2,4-dichlorophenoxy) acetic acid	960 g/kg	1.10.2002	30.9.2012	Only uses as herbicide may be authorised For the implementation of the uniform principles of Annex VI, the conclusions of the review report on 2,4-D, and in particular Appendices I and II thereof, as finalised in the Standing Committee on Plant Health on 2 October 2001 shall be taken into account. In this overall assessment Member States: — must pay particular attention to the protection of the groundwater, when the active substance is applied in regions with vulnerable soil and/or climatic conditions — must pay particular attention to the dermal absorption — must pay particular attention to the protection of non-target arthropods and must ensure that the conditions of authorisation include, where appropriate, risk mitigation measures

▼M31

Number	Common name, identification numbers	IUPAC name	Purity (1)	Entry into force	Expiration of inclusion	Specific provisions
28	Isoproturon CAS No 34123-59-6 CIPAC No 336	3-(4-isopropylphenyl)-1,1-dimethylurea	970 g/kg	1 January 2003	31 December 2012	Only uses as herbicide may be authorised For the implementation of the uniform principles of Annex VI, the conclusions of the review report on isoproturon, and in particular Appendices I and II thereto, as finalised in the Standing Committee on Plant Health on 7 December 2001 shall be taken into account. In this overall assessment Member States: — must pay particular attention to the protection of the groundwater, when the active substance is applied in regions with vulnerable soil and/or climatic conditions or at use rates higher than those described in the review report and must apply risk mitigation measures, where appropriate, — must pay particular attention to the protection of aquatic organisms and must ensure that the conditions of authorisation include, where appropriate, risk mitigation measures
▼M32 29	Ethofumesate CAS No 26225-79-6 CICAP No 223	(±)-2-ethoxy-2,3-dihydro-3,3-dimethylbenzofuran-5-ylmethanesulfonate	960 g/kg	1 March 2003	28 February 2013	Only uses as herbicide may be authorised For the implementation of the uniform principles of Annex VI, the conclusions of the review report on ethofumesate, and in particular Appendices I and II thereof, as finalised in the Standing Committee on the Food Chain and Animal Health on 26 February 2002 shall be taken into account. In this overall assessment Member States may pay particular attention to the protection of the groundwater, when the active substance is applied in regions with vulnerable soil and/or climatic conditions and must apply risk mitigation measures, where appropriate.
▼M33 30	Iprovalicarb CAS No 140923-17-7 CICAP No 620	{2-Methyl-1-[1-(4-methylphenyl)ethylcarbonyl] propyl}-carbamic acid isopropylester	950 g/kg (provisional specification)	1 July 2002	30 June 2011	Only uses as fungicide may be authorised. For the implementation of the uniform principles of Annex VI, the conclusions of the review report on iprovalicarb, and in particular Appendices I and II thereof, as finalised in the Standing Committee on the Food Chain and Animal Health on 26 February 2002 shall be taken into account. In this overall assessment: — the specification of the technical material as commercially manufactured must be confirmed and supported by apporpriate analytical data. The test material used in the toxicity dossier should be compared and verified against this specification of the technical material, — Member States must pay particular attention to the protection of operators.

▼M33

Number	Common name, identification numbers	IUPAC name	Purity (1)	Entry into force	Expiration of inclusion	Specific provisions
31	Prosulfuron CAS No 94125-34-5 CICAP No 579	1-(4-methoxy-6-methyl-1,3,5-triazin-2-yl)-3-[2-(3,3,3-trifluoropropyl)-phenylsulfonyl]-urea	950 g/kg	1 Juli 2002	30 June 2011	Only uses as herbicide may be authorised. For the implementation of the uniform principles of Annex VI, the conclusions of the review report on prosulfuron, and in particular Appendices I and II thereof, as finalised in the Standing Committee on the Food Chain and Animal Health on 26 February 2002 shall be taken into account. In this overall assessment Member States: — must carefully consider the risk to aquatic plants if the active substance is applied adjacent to surface waters. Risk mitigation measures should be applied where appropriate, — must pay particular attention to the protection of groundwater, when the active substance is applied in regions with vulnerable soil and/or climate conditions. Risk mitigation measures should be applied where appropriate.
32	Sulfosulfuron CAS No 141776-32-1 CICAP No 601	1-(4,6-dimethoxypyrimidin-2-yl)-3-[2-ethanesulfonyl-imidazo[1,2-*a*]pyridine) sulfonyl]urea	980 g/kg	1 July 2002	30 June 2011	Only uses as a herbicide may be authorised. For the implementation of the uniform principles of Annex VI, the conclusions of the review report on sulforsulfuron, and in particular Appendices I and II thereof, as finalised in the Standing Committee on the Food Chain and Animal Health on 26 February 2002 shall be taken into account. In this overall assessment: — Member States must pay particular attention to the protection of aquatic plants and algae. Where apporpriate, risk mitigation measures should be applied, — Member States must pay particular attention to the protection of the groundwater, when the active substance is applied in regions with vulnerable soil and/or climatic conditons.
▼M34 33	Cinidon-ethyl CAS No 142891-20-1 CIPAC No 598	(Z)-ethyl 2-chloro-3-[2-chloro-5-(cyclohex-1-ene-1,2-dicarboximido)-phenyl]acrylate	940 g/kg	1 October 2002	30 September 2012	Only uses as herbicide may be authorised. For the implementation of the uniform principles of Annex VI, the conclusions of the review report on cinidon-ethyl, and in particular Appendices I and II thereof, as finalised in the Standing Committee on the Food Chain and Animal Health on 19 April 2002 shall be taken into account. In this overall assessment Member States: — should pay particular attention to the potential for groundwater contamination, when the active substance is applied in regions with vulnerable soil (e.g. soils with neutral or high pH values) and/or climatic conditions, — should pay particular attention to the protection of aquatic organisms. Conditions of authorisation must include risk-mitigation measures, where appropriate.

▼M34

Number	Common name, identification numbers	IUPAC name	Purity (1)	Entry into force	Expiration of inclusion	Specific provisions
34	Cyhalofop butyl CAS No 122008-85-9 CIPAC No 596	Butyl-(R)-2-[4(4-cyano-2-fluorophenoxy) phenoxy]propionate	950 g/kg	1 October 2002	30 September 2012	Only uses as herbicide may be authorised. For the implementation of the uniform principles of Annex VI, the conclusions of the review report on cyhalofop butyl, and in particular Appendices I and II thereof, as finalised in the Standing Committee on the Food Chain and Animal Health on 19 April 2002 shall be taken into account. In this overall assessment: — Member States must carefully consider the potential impact of aerial applications to non-target organisms and in particular to aquatic species. Conditions of authorisation must include restrictions or risk mitigation measures, where appropriate, — Member States must carefully consider the potential impact of terrestrial applications on aquatic organisms within paddy fields. Conditions of authorisation must include risk-mitigation measures, where appropriate.
35	Famoxadone CAS No 131807-57-3 CIPAC No 594	3-anilino-5-methyl-5-(4-phenoxyphenyl)-1,3-oxazolidine-2,4-dione	960 g/kg	1 October 2002	30 September 2012	Only uses as fungicide may be authorised. For the implementation of the uniform principles of Annex VI, the conclusions of the review report on famoxadone, and in particular Appendices I and II thereof, as finalised in the Standing Committee on the Food Chain and Animal Health on 19 April 2002 shall be taken into account. In this overall assessment: — Member States must pay particular attention to potential chronic risks of the parent substance or metabolites to earthworms, — Member States must pay particular attention to the protection of aquatic organisms and must ensure that the conditions of authorisation include, where appropriate, risk-mitigation measures, — Member States should pay particular attention to the protection of operators.
36	Florasulam CAS No 145701-23-1 CIPAC No 616	2′, 6′, 8-Trifluoro-5-methoxy-[1,2,4]-triazolo [1,5-c] pyrimidine-2-sulphonanilide	970 g/kg	1 October 2002	30 September 2012	Only uses as herbicide may be authorised. For the implementation of the uniform principles of Annex VI, the conclusions of the review report on florasulam, and in particular Appendices I and II thereof, as finalised in the Standing Committee on the Food Chain and Animal Health on 19 April 2002 shall be taken into account. In this overall assessment Member States: — should pay particular attention to the potential for groundwater contamination, when the active substance is applied in regions with vulnerable soil and/or climatic conditions. Conditions of authorisation must include risk-mitigation measures, where appropriate.

▼M34

Number	Common name, identification numbers	IUPAC name	Purity (1)	Entry into force	Expiration of inclusion	Specific provisions
37	Metalaxyl-M CAS No 70630-17-0 CIPAC No 580	Methyl(R)-2-{[(2,6-dimethylphenyl)methoxy-acetyl] amino} propionate	910 g/kg	1 October 2002	30 September 2012	Only uses as fungicide may be authorised. For the implementation of the uniform principles of Annex VI, the conclusions of the review report on Metalaxyl-M, and in particular Appendices I and II thereof, as finalised in the Standing Committee on the Food Chain and Animal Health on 19 April 2002 shall be taken into account. In this overall assessment: — particular attention should be given to the potential for groundwater contamination by the active substance or its degradation products CGA 62826, and CGA 108906 when the active substance is applied in regions with vulnerable soil and/or climatic conditions. Risk-mitigation measures should be applied, where appropriate.
38	Picolinafen CAS No 137641-05-5 CIPAC No 639	4′-Fluoro-6-[(α,α,α-trifluoro-m-tolyl)oxy]picolinanilide	970 g/kg	1 October 2002	30 September 2012	Only uses as herbicide may be authorised. For the implementation of the uniform principles of Annex VI, the conclusions of the review report on picolinafen, and in particular Appendices I and II thereof, as finalised in the Standing Committee on the Food Chain and Animal Health on 19 April 2002 shall be taken into account. In this overall assessment Member States: — must pay particular attention to the protection of aquatic organisms. Conditions of authorisation should include risk-mitigation measures, where appropriate.
▼M35 39	Flumioxazine CAS No 103361-09-7 CICAP No 578	N-(7-fluoro-3,4-dihydro-3-oxo-4-prop-2-ynyl-2H-1,4-benzoxazin-6-yl)cyclohex-1-ene-1,2-dicarboximide	960 g/kg	1 January 2003	31 December 2012	Only uses as herbicide may be authorised. For the implementation of the uniform principles of Annex VI, the conclusions of the review report on flumioxazine, and in particular Appendices I and II thereof, as finalised in the Standing Committee on the Food Chain and Animal Health on 28 June 2002 shall be taken into account. In this overall assessment Member States: — must carefully consider the risk to aquatic plants and algae. Conditions of authorisation must include risk mitigation measures, where appropriate.

▼M36

Number	Common name, identification numbers	IUPAC name	Purity (1)	Entry into force	Expiration of inclusion	Specific provisions
40	Deltamethrin CAS No 52918-63-5 CIPAC No 333	(S)-α-cyano-3-phenoxybenzyl (1R,3R)-3-(2,2-dibromovinyl)-2,2-dimethylcyclopropane carboxylate	980 g/kg	1 November 2003	31 October 2013	Only uses as insecticide may be authorised For the implementation of the uniform principles of Annex VI, the conclusions of the review report on deltamethrin, and in particular Appendices I and II thereof, as finalised in the Standing Committee on Plant Health on 18 October 2002 shall be taken into account. In this overall assessment Member States: — must pay particular attention to the operator safety and must ensure that the conditions of authorisation include appropriate protective measures, — should observe the acute dietary exposure situation of consumers in view of future revisions of maximum residue levels, — must pay particular attention to the protection of aquatic organisms, bees and non-target arthropods and must ensure that the conditions of authorisation include risk mitigation measures, where appropriate.
▼M37 41	Imazamox CAS No 114311-32-9 CIPAC No 619	(±)-2-(4-isopropyl-4-methyl-5-oxo-2-imidazolin-2-yl)-5-(methoxymethyl) nicotinic acid	950 g/kg	1 July 2003	30 June 2013	Only uses as herbicide may be authorised. For the implementation of the uniform principles of Annex VI, the conclusions of the review report on imazamox, and in particular Appendices I and II thereof, as finalised in the Standing Committee on the Food Chain and Animal Health on 3 December 2002 shall be taken into account. In this overall assessment Member States should pay particular attention to the potential for groundwater contamination, when the active substance is applied in regions with vulnerable soil and/or climate conditions. Risk mitigation measures should be applied where appropriate.
42	Oxasulfuron CAS No 144651-06-9 CIPAC No 626	Oxetan-3-yl 2[(4,6-dimethylpyrimidin-2-yl) carbamoyl-sulfamoyl] benzoate	960 g/kg	1 July 2003	30 June 2013	Only uses as herbicide may be authorised. For the implementation of the uniform principles of Annex VI, the conclusions of the review report on oxasulfuron, and in particular Appendices I and II thereof, as finalised in the Standing Committee on the Food Chain and Animal Health on 3 December 2002 shall be taken into account. — Member States must pay particular attention to the protection of groundwater, when the active substance is applied in regions with vulnerable soil and/or climate conditions. Risk mitigation measures should be applied, where appropriate.

▼M37

Number	Common name, identification numbers	IUPAC name	Purity (1)	Entry into force	Expiration of inclusion	Specific provisions
43	Ethoxysulfuron CAS No 126801-58-9 CIPAC No 591	3-(4,6-dimethoxypyrimidin-2-yl)-1-(2-ethoxyphenoxy-sulfonyl)urea	950 g/kg	1 July 2003	30 June 2013	Only uses as herbicide may be authorised. For the implementation of the uniform principles of Annex VI, the conclusions of the review report on ethoxysulfuron, and in particular Appendices I and II thereof, as finalised in the Standing Committee on the Food Chain and Animal Health on 3 December 2002 shall be taken into account. Member States should pay particular attention to the protection of non-target aquatic plants and algae in drainage canals. Risk mitigation measures should be applied where appropriate.
44	Foramsulfuron CAS No 173159-57-4 CIPAC No 659	1-(4,6-dimethoxypyrimidin-2-yl)-3-(2-dimethylcarbamoyl-5-formamidophenylsulfonyl)urea	940 g/kg	1 July 2003	30 June 2013	Only uses as herbicide may be authorised. For the implementation of the uniform principles of Annex VI, the conclusions of the review report on foramsulfuron, and in particular Appendices I and II thereof, as finalised in the Standing Committee on the Food Chain and Animal Health on 3 December 2002 shall be taken into account. In this overall assessment Member States should pay particular attention to the protection of aquatic plants. Risk mitigation measures should be applied, where appropriate.
45	Oxadiargyl CAS No 39807-15-3 CIPAC No 604	5-tert-butyl-3-(2,4-dichloro-5-propargyloxyphenyl)-1,3,4 oxadiazol-2-(3H)-one	980 g/kg	1 July 2003	30 June 2013	Only uses as herbicide may be authorised. For the implementation of the uniform principles of Annex VI, the conclusions of the review report on oxadiargyl, and in particular Appendices I and II thereof, as finalised in the Standing Committee on the Food Chain and Animal Health on 3 December 2002 shall be taken into account. In this overall assessment Member States should pay particular attention to the protection of algae and aquatic plants. Risk mitigation measures should be applied where appropriate.
46	Cyazofamid CAS No 120116-88-3 CIPAC No 653	4-chloro-2cyano-N,N-dimethyl-5-P-tolylimidazole -1-sulfonamide	935 g/kg	1 July 2003	30 June 2013	Only uses as fungicide may be authorised. For the implementation of the uniform principles of Annex VI, the conclusions of the review report on cyazofamid, and in particular Appendices I and II thereof, as finalised in the Standing Committee on the Food Chain and Animal Health on 3 December 2002 shall be taken into account. In this overall assessment — Member States must pay particular attention to the protection of aquatic organisms; — Member States must pay particular attention to the degradation kinetics of the metabolite CTCA in soil, especially for Northern European regions. Risk mitigation measures or use restrictions should be applied where appropriate.

▼M38

Number	Common name, identification numbers	IUPAC name	Purity (1)	Entry into force	Expiration of inclusion	Specific provisions
47	2,4-DB CAS No 94-82-6 CIPAC No 83	4-(2,4-dichlorophenoxy) butyric acid	940 g/kg	1 January 2004	31 December 2013	Only use as herbicide may be authorised For the implementation of the uniform principles of Annex VI, the conclusions of the review report on 2,4-DB, and in particular Appendices I and II thereof, as finalised in the Standing Committee on the Food Chain and Animal Health on 3 December 2002 shall be taken into account. In this overall assessment Member States: must pay particular attention to the protection of groundwater when the active substance is applied in regions with vulnerable soil and/or climatic conditions. Risk mitigation measures should be applied, where appropriate.
48	Beta-cyfluthrin CAS No 68359-37-5 (unstated stereochemistry) CIPAC No 482	(1RS,3RS;1RS,3SR)-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylic acid (SR)-α-cyano- (4-fluoro-3-phenoxy-phenyl)methyl ester	965 g/kg	1 January 2004	31 December 2013	Only use as insecticide may be authorised Uses other than ornamental in greenhouses and seed treatment are currently not adequately supported and have not shown to be acceptable under the criteria required by Annex VI. To support authorisations for such uses, data and information to prove their acceptability to human consumers and the environment will have to be generated and submitted to the Member States. This will be the case in particular for data to assess in all detail the risks of outdoor foliar uses and the dietary risks of foliar treatment in edible crops. For the implementation of the uniform principles of Annex VI, the conclusions of the review report on beta-cyfluthrin, and in particular Appendices I and II thereof, as finalised in the Standing Committee on the Food Chain and Animal Health on 3 December 2002 shall be taken into account. In this overall assessment: Member States must pay particular attention to the protection of non-target arthropods. Conditions of authorisation should include adequate risk mitigation measures.
49	Cyfluthrin CAS No 68359-37-5 (unstated stereochemistry) CIPAC No 385	(RS),-α-cyano-4-fluoro-3-phenoxybenzyl-(1RS,3RS;1RS,3SR)-3-(2,2-dichlorovinyl)-2,2-dimethycyclopropanecarboxylate	920 g/kg	1 January 2004	31 December 2013	Only use as insecticide may be authorised Uses other than ornamental in greenhouses and seed treatment are currently not adequately supported and have not shown to be acceptable under the criteria required by Annex VI. To support authorisations for such uses, data and information to prove their acceptability to human consumers and the environment will have to be generated and submitted to the Member States. This will be the case in particular for data to assess in all detail the risks of outdoor foliar uses and the dietary risks of foliar treatment in edible crops. For the implementation of the uniform principles of Annex VI, the conclusions of the review report on cyfluthrin, and in particular Appendices I and II thereof, as finalised in the Standing Committee on the Food Chain and Animal Health on 3 December 2002 shall be taken into account. In this overall assessment: Member States must pay particular attention to the protection of non-target arthropods. Conditions of authorisation should include adequate risk mitigation measures.

▼M38

Number	Common name, identification numbers	IUPAC name	Purity (1)	Entry into force	Expiration of inclusion	Specific provisions
50	Iprodione CAS No 36734-19-7 CIPAC No 278	3-(3,5-dichlorophenyl)-N-isopropyl-2,4-dioxo-imidazolidine-1-carboxi-mide	960 g/kg	1 January 2004	31 December 2013	Only use as fungicide may be authorised For the implementation of the uniform principles of Annex VI, the conclusions of the review report on iprodione, and in particular Appendices I and II thereof, as finalised in the Standing Committee on the Food Chain and Animal Health on 3 December 2002 shall be taken into account. In this overall assessment, Member States: — should pay particular attention to the potential for ground water contamination when the active substance is applied at high use rates (in particular use in turf) on acidic soils (pH below 6) under vulnerable climatic conditions, — must carefully consider the risk to aquatic invertebrates if the active substance is applied directly adjacent to surface waters. Risk mitigation measures should be applied, where appropriate.
51	Linuron CAS No 330-55-2 CIPAC No 76	3-(3,4-dichlorophenyl)-1-methoxy-1-methylurea	900 g/kg	1 January 2004	31 December 2013	Only use as herbicide may be authorised For the implementation of the uniform principles of Annex VI, the conclusions of the review report on linuron, and in particular Appendices I and II thereof, as finalised in the Standing Committee on the Food Chain and Animal Health on 3 December 2002 shall be taken into account. In this overall assessment Member States: — must pay particular attention to the protection of wild mammals, non-target arthropods and aquatic organisms. Conditions of authorisation should include risk mitigation measures, where appropriate, — must pay particular attention to the protection of operators.
52	Maleic hydrazide CAS No 123-33-1 CIPAC No 310	6-hydroxy-2H-pyridazin-3-one	940 g/kg The active substance shall comply with Council Directive 79/117/EEC (4), as amended by Council Directive 90/533/EEC (5).	1 January 2004	31 December 2013	Only use as growth regulator may be authorised For the implementation of the uniform principles of Annex VI, the conclusions of the review report on maleic hydrazide, and in particular Appendices I and II thereof, as finalised in the Standing Committee on the Food Chain and Animal Health on 3 December 2002 shall be taken into account. In this overall assessment Member States: — must pay particular attention to the protection of non-target arthropods and must ensure that the conditions of authorisation include risk mitigation measures, where appropriate, — must pay particular attention to the potential for groundwater contamination, when the active substance is applied in regions with vulnerable soil and/or climatic conditions. Risk mitigation measures should be applied, where appropriate.

▼M38

Number	Common name, identification numbers	IUPAC name	Purity (1)	Entry into force	Expiration of inclusion	Specific provisions
53	Pendimethalin CAS No 40487-42-1 CIPAC No 357	N-(1-ethylpropyl)-2,6-dinitro-3,4-xylidene	900 g/kg	1 January 2004	31 December 2013	Only use as herbicide may be authorised For the implementation of the uniform principles of Annex VI, the conclusions of the review report on pendimethalin, and in particular Appendices I and II thereof, as finalised in the Standing Committee on the Food Chain and Animal Health 3 December 2002 shall be taken into account. In this overall assessment Member States: — must pay particular attention to the protection of aquatic organisms and non-target terrestrial plants. Conditions of authorisation must include risk mitigation measures, where appropriate, — must pay particular attention to the possibility of short-range transport of the active substance in air.
▼M40 59	Trifloxystrobin CAS No 141517-21-7 CIPAC No 617	Methyl (E)-methoxyimino-{(E)-a-[1-a-(a,a,a-trifluoro-m-tolyl)ethylideneaminooxyl]-o-tolyl}acetate	960 g/kg	1 October 2003	30 September 2013	Only use as fungicide may be authorised. For the implementation of the uniform principles of Annex VI, the conclusions of the review report on trifloxystrobin, and in particular Appendices I and II thereof, as finalised in the Standing Committee on the Food Chain and Animal Health on 15 April 2003 shall be taken into account. In this overall assessment: — Member States should pay particular attention to the protection of groundwater, when the active substance is applied in regions with vulnerable soil and/or climate conditions. Risk mitigation measures should be applied and/or monitoring programs may be initiated where appropriate.
60	Carfentrazone ethyl CAS No 128639-02.1 CIPAC No 587	Ethyl (RS)-2-chloro-3-[2-chloro-5-(4-difluoromethyl-4,5-dihydro-3-methyl-5oxo-1H 1,2,4-triazol-1-yl)-4-fluorophenyl]propionate	900 g/kg	1 October 2003	30 September 2013	Only use as herbicide may be authorised. For the implementation of the uniform principles of Annex VI, the conclusions of the review report on carfentrazone-ethyl, and in particular Appendices I and II thereof, as finalised in the Standing Committee on the Food Chain and Animal Health on 15 April 2003 shall be taken into account. In this overall assessment: — Member States should pay particular attention to the protection of groundwater, when the active substance is applied in regions with vulnerable soil and/or climate conditions. Risk mitigation measures should be applied where appropriate.

▼M40

Number	Common name, identification numbers	IUPAC name	Purity (1)	Entry into force	Expiration of inclusion	Specific provisions
61	Mesotrione CAS No 104206-8 CIPAC No 625	2-(4-mesyl-2-nitrobenzoyl) cyclohexane -1,3-dione	920 g/kg The manufacturing impurity 1-cyano-6-(methylsulfonyl)-7-nitro-9H-xanthen-9-one is considered to be of toxicological concern and must remain below 0.0002 % (w/w) in the technical product.	1 October 2003	30 September 2013	Only use as herbicide may be authorised. For the implementation of the uniform principles of Annex VI, the conclusions of the review report on mesotrione, and in particular Appendices I and II thereof, as finalised in the Standing Committee on the Food Chain and Animal Health on 15 April 2003 shall be taken into account.
62	Fenamidone CAS No 161326-34-7 CIPAC No 650	(S)-5-methyl-2-methylthio-5-phenyl-3-phenylamino-3,5-dihydroimidazol-4-one	975 g/kg	1 October 2003	30 September 2013	Only use as fungicide may be authorised. For the implementation of the uniform principles of Annex VI, the conclusions of the review report on fenamidone, and in particular Appendices I and II thereof, as finalised in the Standing Committee on the Food Chain and Animal Health on 15 April 2003 shall be taken into account. In this overall assessment Member States: — should pay particular attention to the protection of groundwater, when the active substance is applied in regions with vulnerable soil and/or climate conditions, — should pay particular attention to the protection of non-target arthropods, — should pay particular attention to the protection of aquatic organisms. Risk mitigation measures should be applied where appropriate.
63	Isoxaflutole CAS No 141112-29-0 CIPAC No 575	5-cyclopropyl-4-(2-methylsulfonyl-4-trifluoromethylbenzoyl) isoxazole	950 g/kg	1 October 2003	30 September 2013	Only use as herbicide may be authorised. For the implementation of the uniform principles of Annex VI, the conclusions of the review report on isoxaflutole, and in particular Appendices I and II thereof, as finalised in the Standing Committee on the Food Chain and Animal Health on 15 April 2003 shall be taken into account. In this overall assessment Member States: — must pay particular attention to the protection of groundwater, when the active substance is applied in regions with vulnerable soil and/or climate conditions. Risk mitigation measures or monitoring programs should be applied where appropriate.

▼M43

Number	Common name, identification numbers	IUPAC name	Purity (1)	Entry into force	Expiration of inclusion	Specific provisions
64	Flurtamone CAS No 96525-23-4	(RS)-5-methylamino-2-phenyl-4-(a,a,a-trifluoro-m-tolyl) furan-3 (2H)-one	960 g/kg	1 January 2004	31 December 2013	Only uses as herbicide may be authorised. For the implementation of the uniform principles of Annex VI, the conclusions of the review report on flurtamone, and in particular Appendices I and II thereof, as finalised in the Standing Committee on the Food Chain and Animal Health on 4 July 2003 shall be taken into account. In this overall assessment Member States: — should pay particular attention to the protection of groundwater, when the active substance is applied in regions with vulnerable soil and/or climate conditions, — should pay particular attention to the protection of algae and other aquatic plants. Risk mitigation measures should be applied where appropriate.
65	Flufenacet CAS No 142459-58-3 CIPAC No 588	4'-fluoro-N-isopropyl-2-[5-(trifluoromethyl)-1,3,4-thiadiazol-2-yloxy]acetanilide	950 g/kg	1 January 2004	31 December 2013	Only uses as herbicide may be authorised. For the implementation of the uniform principles of Annex VI, the conclusions of the review report on flufenacet, and in particular Appendices I and II thereof, as finalised in the Standing Committee on the Food Chain and Animal Health on 4 July 2003 shall be taken into account. In this overall assessment Member States: — should pay particular attention to the protection of groundwater, when the active substance is applied in regions with vulnerable soil and/or climate conditions, — should pay particular attention to the protection of algae and aquatic plants, — should pay particular attention to the protection of operators. Risk mitigation measures should be applied where appropriate.
66	Iodosulfuron CAS No 185119-76-0 (parent) 144550-36-7 (iodosulfuron-methyl-sodium) CIPAC No 634 (parent) 634.501 (iodosulfuron-methyl-sodium)	4-iodo-2-[3-(4-methoxy-6-methyl-1,3,5-triazin-2-yl)-ureidosulfonyl]-benzoate	910 g/kg	1 January 2004	31 December 2013	Only uses as herbicide may be authorised. For the implementation of the uniform principles of Annex VI, the conclusions of the review report on iodosulfuron, and in particular Appendices I and II thereof, as finalised in the Standing Committee on the Food Chain and Animal Health on 4 July 2003 shall be taken into account. In this overall assessment Member States: — should pay particular attention to the potential of iodosulfuron and its metabolites for groundwater contamination, when the active substance is applied in regions with vulnerable soil and/or climate conditions, — should pay particular attention to the protection of aquatic plants. Risk mitigation measures should be applied where appropriate.

▼M43

Number	Common name, identification numbers	IUPAC name	Purity (1)	Entry into force	Expiration of inclusion	Specific provisions
67	Dimethenamid-p CAS No 163515-14-8 CIPAC No 638	S-2-chloro-N-(2,4-dimethyl-3-thienyl)-N-(2-methoxy-1-methylethyl)-acetamide	890 g/kg (preliminary value based on a pilot plant)	1 January 2004	31 December 2013	Only uses as herbicide may be authorised. For the implementation of the uniform principles of Annex VI, the conclusions of the review report on dimethenamid-p, and in particular Appendices I and II thereof, as finalised in the Standing Committee on the Food Chain and Animal Health on 4 July 2003 shall be taken into account. In this overall assessment Member States: — should pay particular attention to the potential of the metabolites of dimethenamid-p for groundwater contamination, when the active substance is applied in regions with vulnerable soil and/or climate conditions, — should pay particular attention to the protection of aquatic ecosystems, especially of aquatic plants. Risk mitigation measures should be applied where appropriate. The Member States shall inform the Commission in accordance with Article 13(5) on the specification of the technical material as commercially manufactured.
68	Picoxystrobin CAS No 117428-22-5 CIPAC No 628	Methyl (E)-3-methoxy-2-{2-[6-(trifluoromethyl) -2- pyridyloxymethyl]-phenyl} acrylate	950 g/kg (preliminary value based on a pilot plant)	1 January 2004	31 December 2013	Only uses as fungicide may be authorised. For the implementation of the uniform principles of Annex VI, the conclusions of the review report on picoxystrobin, and in particular Appendices I and II thereof, as finalised in the Standing Committee on the Food Chain and Animal Health on 4 July 2003 shall be taken into account. In this overall assessment Member States: — should pay particular attention to the protection of groundwater, when the active substance is applied in regions with vulnerable soil and/or climate conditions, — should pay particular attention to the protection of soil organisms, — should pay particular attention to the protection of aquatic ecosystems. Risk mitigation measures should be applied where appropriate. The Member States shall inform the Commission in accordance with Article 13(5) on the specification of the technical material as commercially manufactured.

▼M43

Number	Common name, identification numbers	IUPAC name	Purity (1)	Entry into force	Expiration of inclusion	Specific provisions
69	Fosthiazate CAS No 98886-44-3 CIPAC No 585	(RS)-S-sec-butyl O-ethyl 2-oxo-1,3-thiazolidin-3-ylphosphonothioate	930 g/kg	1 January 2004	31 December 2013	Only uses as nematicide may be authorised. For the implementation of the uniform principles of Annex VI, the conclusions of the review report on fosthiazate, and in particular Appendices I and II thereof, as finalised in the Standing Committee on the Food Chain and Animal Health on 4 July 2003 shall be taken into account. In this overall assessment Member States: — should pay particular attention to the protection of groundwater, when the active substance is applied in regions with vulnerable soil and/or climate conditions, — should pay particular attention to the protection of birds and wild mammals in particular if the substance is applied during the breeding season, — should pay particular attention to the protection of non-target soil organisms. Risk mitigation measures should be applied where appropriate. In order to mitigate the potential risk to small birds, product authorisations must require that a very high level of incorporation of granules into soil is achieved. The Member States shall inform the Commission in accordance with Article 13(5) on the specification of the technical material as commercially manufactured.
70	Silthiofam CAS No 175217-20-6 CIPAC No 635	N-allyl-4,5-dimethyl-2-(trimethylsilyl)thiophene-3-carboxamide	950 g/kg	1 January 2004	31 December 2013	Only uses as fungicide may be authorised. Uses other than seed treatments are currently not adequately supported by data. To support authorisations for such uses, data and information to prove their acceptability for consumers, operators and the environment will have to be generated and submitted to the Member States. For the implementation of the uniform principles of Annex VI, the conclusions of the review report on silthiofam, and in particular Appendices I and II thereof, as finalised in the Standing Committee on the Food Chain and Animal Health on 4 July 2003 shall be taken into account. In this overall assessment Member States must pay particular attention to the protection of operators. Risk mitigation measures must be applied, where appropriate.

▼M41

Number	Common name, identification numbers	IUPAC name	Purity (1)	Entry into force	Expiration of inclusion	Specific provisions
71	Coniothyrium minitans Strain CON/M/91-08 (DSM 9660) CIPAC No 614	Not applicable	For details on purity and production control see Review Report	1 January 2004	31 December 2013	Only uses as fungicide may be authorised. When granting authorisations, the conclusions of the review report on *Coniothyrium minitans*, and in particular Appendices I and II thereof, as finalised in the Standing Committee on the Food Chain and Animal Health on 4 July 2003 shall be taken into account. In this overall assessment: — Member States must pay particular attention to the operator and worker safety and must ensure that the conditions of authorisation include appropriate protective measures.

▼M22

(1) Further details on identity and specification of active substances are provided in their review reports.

▶M24 (2) Further details on identity and specification of active substance are provided in the review report (doc. 6797/VI/99 rev. 2). ◀

▶M27 (3) Further details on identity and specification of active substances are provided in the review report for DPX KE 459 (flupyrsulfuron-methyl) (5050/VI/97). ◀

▶M38 (4) OJ L 33, 8.2.1979, p. 36.

(5) OJ L 296, 27.10.1990 p. 63. ◀

ANNEX

The following entry shall be added at the end of the table in Annex I to Directive 91/414/EEC:

No	Common name, identification numbers	IUPAC name	Purity (1)	Entry into force	Expiration of inclusion	Specific provisions
'79	chlorpropham CAS No 101-21-3 CIPAC No 43	Isopropyl 3-chlorophenylcarbamate	975 g/kg	1 February 2005	31 January 2015	Only uses as herbicide and sprout suppression may be authorised. For the implementation of the uniform principles of Annex VI, the conclusions of the review report on chlorpropham, and in particular Appendices I and II thereof, as finalised in the Standing Committee on the Food Chain and Animal Health on 28 November 2003 shall be taken into account. In this overall assessment Member States should pay particular attention to the protection of operators, consumers and non-target arthropods. Conditions of authorisation should include risk mitigation measures, where appropriate.

(1) Further details on identity and specification of active substance are provided in the review report.'

ANNEX

In Annex I to Directive 91/414/EEC the following rows are added at the end of the table

No	Common name, identification numbers	IUPAC name	Purity (1)	Entry into force	Expiration of inclusion	Specific provisions
'80	Benzoic acid CAS No 65-85-0 CIPAC No 622	benzoic acid	990 g/kg	1 June 2004	31 May 2014	Only uses as disinfectant may be authorised. For the implementation of the uniform principles of Annex VI, the conclusions of the review report on benzoic acid, and in particular Appendices I and II thereof, as finalised in the Standing Committee on the Food Chain and Animal Health on 28 November 2003 shall be taken into account.
81	Flazasulfuron CAS No 104040-78-0 CIPAC No 595	1-(4,6-dimethoxypyrimidin-2-yl)-3-(3-trifluoromethyl-2-pyridyl-sulphonyl)urea	940 g/kg	1 June 2004	31 May 2014	Only uses as herbicide may be authorised. For the implementation of the uniform principles of Annex VI, the conclusions of the review report on flazasulfuron, and in particular Appendices I and II thereto, as finalised in the Standing Committee on the Food Chain and Animal Health on 28 November 2003 shall be taken into account. In this overall assessment Member States — should pay particular attention to the potential for groundwater contamination, when the active substance is applied in regions with vulnerable soil and/or climate conditions, — should pay particular attention to the protection of aquatic plants. Risk mitigation measures should be applied where appropriate. The Member States shall inform the Commission in accordance with Article 13(5) on the specification of the technical material as commercially manufactured.

No	Common name, identification numbers	IUPAC name	Purity (1)	Entry into force	Expiration of inclusion	Specific provisions
82	Pyraclostrobin CAS No 175013-18-0 CIPAC No 657	methyl N-(2-{[1-(4-chlorophenyl)-1H-pyrazol-3-yl]oxymethyl}phenyl) N-methoxy carbamate	975 g/kg The manufacturing impurity dimethylsulfate (DMS) is condidered to be of toxicological concern and must not exceed a concentration of 0,0001 % in the technical product	1 June 2004	31 May 2014	Only uses as fungicide may be authorised. For the implementation of the uniform principles of Annex VI, the conclusions of the review report on pyraclostrobin, and in particular Appendices I and II thereto, as finalised in the Standing Committee on the Food Chain and Animal Health on 28 November 2003 shall be taken into account. In this overall assessment Member States — should pay particular attention to the protection of aquatic organisms, especially fish, — should pay particular attention to the protection of terrestrial arthropods and earthworms. Risk mitigation measures should be applied where appropriate. The Member States shall inform the Commission in accordance with Article 13(5) on the specification of the technical material as commercially manufactured.

(1) Further details on identity and specification of active substances are provided in the review report.'

ANNEX

The following entries shall be added at the end of the table in Annex I to Directive 91/414/EC.

No	Common name, identification numbers	IUPAC name	Purity (1)	Entry into force	Expiration of inclusion	Specific provisions
'84	alpha-cypermethrin CAS No 67375-30-8 CIPAC No	Racemate comprising (S)-α- cyano-3 phenoxybenzyl-(1R)-cis-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropane carboxylate and (R)-α- cyano-3 phenoxybenzyl-(1S)-cis-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropane carboxylate (= cis-2 isomer pair of cypermethrin)	930 g/kg CIS-2	1 March 2005	28 February 2015	Only uses as insecticide may be authorised. For the implementation of the uniform principles of Annex VI, the conclusions of the review report on alpha-cypermethrin, and in particular Appendices I and II thereof, as finalised in the Standing Committee on the Food Chain and Animal Health on 13 February 2004 shall be taken into account. In this overall assessment: — Member States must pay particular attention to the protection of aquatic organisms, bees and non-target arthropods and must ensure that the conditions of authorisation include risk mitigation measures. — Member States must pay particular attention to the operator safety and must ensure that the conditions of authorisation include appropriate protective measures.
85	benalaxyl CAS No 71626-11-4 CIPAC No 416	Methyl N-phenylacetyl–N-2, 6–xylyl–DL-alaninate	960 g/kg	1 March 2005	28 February 2015	Only uses as fungicide may be authorised. For the implementation of the uniform principles of Annex VI, the conclusions of the review report on benalaxyl, and in particular Appendices I and II thereto, as finalised in the Standing Committee on the Food Chain and Animal Health on 13 February 2004 shall be taken into account. In this overall assessment Member States should pay particular attention to the potential for groundwater contamination, when the active substance is applied in regions with vulnerable soil and/or climatic conditions. Conditions of authorisation should include risk mitigation measures, where appropriate.
86	bromoxynil CAS No 1689-84-5 CIPAC No 87	3,5 dibromo – 4- hydroxybenzonitrile	970 g/kg	1 March 2005	28 February 2015	Only uses as herbicide may be authorised. For the implementation of the uniform principles of Annex VI, the conclusions of the review report on bromoxynil, and in particular Appendices I and II thereto, as finalised in the Standing Committee on the Food Chain and Animal Health on 13 February 2004 shall be taken into account. In this overall assessment Member States must pay particular attention to the protection of birds and wild mammals, in particular if the substance is applied in winter, and of aquatic organisms. Conditions of authorisation should include risk mitigation measures, where appropriate.

No	Common name, identification numbers	IUPAC name	Purity (1)	Entry into force	Expiration of inclusion	Specific provisions
87	desmedipham CAS No 13684-56-5 CIPAC No 477	ethyl 3'-phenylcarbamoyloxycarbanilate ethyl 3-phenylcarbamoyloxyphenylcarbamate	Min. 970 g/kg	1 March 2005	28 February 2015	Only uses as herbicide may be authorised. For the implementation of the uniform principles of Annex VI, the conclusions of the review report on desmedipham, and in particular Appendices I and II thereto, as finalised in the Standing Committee on the Food Chain and Animal Health on 13 February 2004 shall be taken into account. In this overall assessment Member States should pay particular attention to the protection of aquatic organisms and earthworms. Risk mitigation measures should be applied if appropriate
88	ioxynil CAS No 13684-83-4 CIPAC No 86	4- hydroxy- 3,5- di-iodobenzonitrile	960 g/kg	1 March 2005	28 February 2015	Only uses as herbicide may be authorised. For the implementation of the uniform principles of Annex VI, the conclusions of the review report on ioxynil, and in particular Appendices I and II thereto, as finalised in the Standing Committee on the Food Chain and Animal Health on 13 February 2004 shall be taken into account. In this overall assessment Member States must pay particular attention to the protection of birds and wild mammals in particular if the substance is applied in winter and to aquatic organisms. Conditions of authorisation should include risk mitigation measures, where appropriate.
89	phenmedipham CAS No 13684-63-4 CIPAC No 77	methyl 3-(3-methylcarbaniloyloxy)carbanilate; 3-methoxycarbonylaminophenyl 3'-methylcarbanilate	Min. 970 g/kg	1 March 2005	28 February 2015	Only uses as herbicide may be authorised. For the implementation of the uniform principles of Annex VI, the conclusions of the review report on phenmedipham, and in particular Appendices I and II thereto, as finalised in the Standing Committee on the Food Chain and Animal Health on 13 February 2004 shall be taken into account. In this overall assessment Member States should pay particular attention to the protection of aquatic organisms. Conditions of authorisation should include risk mitigation measures, where appropriate.

(1) Further details on identity and specification of active substance are provided in the review report.'

ANNEX

In Annex I the following row is added at the end of the table:

No	Common Name, Identification Numbers	IUPAC Name	Purity (1)	Entry into force	Expiration of inclusion	Specific provisions
'83	Quinoxyfen CAS No 124495-18-7 CIPAC No 566	5, 7-dichloro-4 (p-fluorophenoxy) quinoline	970 g/kg	1 September 2004	31 August 2014	Only uses as fungicide may be authorised. For the implementation of the uniform principles of Annex VI, the conclusions of the review report on quinoxyfen, and in particular Appendices I and II thereto, as finalised in the Standing Committee on the Food Chain and Animal Health on 28 November 2003, shall be taken into account. Member States should pay particular attention to the protection of aquatic organisms. Risk mitigation measures must be applied and monitoring programmes must be initiated in vulnerable zones where appropriate.

(1) Further details on identity and specification of active substances are provided in the review report.'

ANNEX

In Annex I the following rows are added at the end of the table.

No	Common Name, Identification Numbers	IUPAC Name	Purity (1)	Entry into force	Expiration of inclusion	Specific provisions
'91	Mepanipyrim CAS No 110235-47-7 CIPAC No 611	N-(4-methyl-6-prop-1-ynyl-pyrimidin-2-yl)aniline	960 g/kg	1 October 2004	30 September 2014	Only uses as fungicide may be authorised. For the implementation of the uniform principles of Annex VI, the conclusions of the review report on mepanipyrim, and in particular Appendices I and II thereof, as finalised in the Standing Committee on the Food Chain and Animal Health on 30 March 2004 shall be taken into account. In this overall assessment Member States should pay particular attention to the protection of aquatic organisms. Risk mitigation measures should be applied where appropriate.

(1) Further details on identity and specification of active substances are provided in the review report.'

ANNEX

In Annex I to Directive 91/414/EEC the following rows are added at the end of the table:

No	Common name, identification numbers	IUPAC Name	Purity (1)	Entry into force	Expiration of inclusion	Specific provisions
'92	Acetamiprid CAS No 160430-64-8 CIPAC No Not yet allocated	(E)-N^1-[(6-chloro-3-pyridyl)-methyl]-N^2-cyano-N^1-methylacetamidine	≥ 990 g/kg	1 January 2005	31 December 2014	Only uses as insecticide may be authorised. For the implementation of the uniform principles of Annex VI, the conclusions of the review report on Acetamiprid, and in particular Appendices I and II thereof, as finalised in the Standing Committee on the Food Chain and Animal Health on 29 June 2004 shall be taken into account. In this overall assessment Member States — should pay particular attention to worker exposure, — should pay particular attention to the protection of aquatic organisms. Risk mitigation measures should be applied where appropriate.
93	Thiacloprid CAS No 111988-49-9 CIPAC No 631	(Z)-N-{3-[(6-Chloro-3-pyridinyl)methyl]-1,3-thiazolan-2-yliden}cyanamide	≥ 975 g/kg	1 January 2005	31 December 2014	Only uses as insecticide may be authorised. For the implementation of the uniform principles of Annex VI, the conclusions of the review report on Thiacloprid, and in particular Appendices I and II thereof, as finalised in the Standing Committee on the Food Chain and Animal Health on 29 June 2004 shall be taken into account. In this overall assessment Member States — should pay particular attention to the protection of non-target arthropods, — should pay particular attention to the protection of aquatic organisms, — should pay particular attention to the potential for groundwater contamination, when the active substance is applied in regions with vulnerable soil and/or climatic conditions. Risk mitigation measures should be applied where appropriate.

(1) Further details on identity and specification of active substances are provided in the review report.'

ANNEX

In Annex I to Directive 91/414/EEC the following rows are added at the end of the table:

No	Common name, identification numbers	IUPAC Name	Purity (*)	Entry into force	Expiration of inclusion	Specific provisions
'95	Imazosulfuron CAS No: 122548-33-8 CIPAC No: 590	1-(2-chloroimidazo[1,2-a]pyridin-3-ylsul-phonyl)-3-(4,6-dimethoxypyrimidin-2-yl)urea	≥ 980 g/kg	1 April 2005	31 March 2015	Only uses as herbicide may be authorised. For the implementation of the uniform principles of Annex VI, the conclusions of the review report on imazosulfuron, and in particular Appendices I and II thereof, as finalised in the Standing Committee on the Food Chain and Animal Health on 8 October 2004 shall be taken into account. In this overall assessment Member States should pay particular attention to the protection of aquatic and terrestrial non-target plants. Risk mitigation measures should be applied where appropriate.
96	Laminarin CAS No: 9008-22-4 CIPAC No: 671	(1→3)-β-D-glucan (according to IUPAC-IUB Joint Commission on Biochemical Nomenclature)	≥ 860 g/kg on dry matter	1 April 2005	31 March 2015	Only uses as elicitor of the crop's self-defence mechanisms may be authorised. For the implementation of the uniform principles of Annex VI, the conclusions of the review report on laminarin, and in particular Appendices I and II thereof, as finalised in the Standing Committee on the Food Chain and Animal Health on 8 October 2004 shall be taken into account.
97	Methoxyfenozide CAS No: 161050-58-4 CIPAC No: 656	N-tert-Butyl-N'-(3-methoxy-o-toluoyl)-3,5-xylohydrazide	≥ 970 g/kg	1 April 2005	31 March 2015	Only uses as insecticide may be authorised. For the implementation of the uniform principles of Annex VI, the conclusions of the review report on methoxyfenozide, and in particular Appendices I and II thereof, as finalised in the Standing Committee on the Food Chain and Animal Health on 8 October 2004 shall be taken into account. In this overall assessment Member States should pay particular attention to the protection of terrestrial and aquatic non-target arthropods. Risk mitigation measures should be applied where appropriate.

No	Common name, identification numbers	IUPAC Name	Purity (*)	Entry into force	Expiration of inclusion	Specific provisions
98	S-metolachlor CAS No: 87392-12-9 (S-isomer) 178961-20-1 (R-isomer) CIPAC No: 607	Mixture of: (aRS, 1 S)-2-chloro-N-(6-ethyl-o-tolyl)-N-(2-methoxy-1-methylethyl)acetamide (80-100 %) and: (aRS, 1 R)-2-chloro-N-(6-ethyl-o-tolyl)-N-(2-methoxy-1-methylethyl)acetamide (20-0 %)	≥ 960 g/kg	1 April 2005	31 March 2015	Only uses as herbicide may be authorised. For the implementation of the uniform principles of Annex VI, the conclusions of the review report on s-metolachlor, and in particular Appendices I and II thereof, as finalised in the Standing Committee on the Food Chain and Animal Health on 8 October 2004 shall be taken into account. In this overall assessment Member States — should pay particular attention to the potential for groundwater contamination, particularly of the active substance and its metabolites CGA 51202 and CGA 354743, when the active substance is applied in regions with vulnerable soil and/or climatic conditions, — should pay particular attention to the protection of aquatic plants. Risk mitigation measures should be applied where appropriate.

(*) Further details on identity and specification of active substances are provided in the review report.'

ANNEX

In Annex I to Directive 91/414/EEC, the following rows are added at the end of the table:

No	Common name, identification numbers	IUPAC name	Purity (*)	Entry into force	Expiration of inclusion	Specific provisions
'100	Etoxazole CAS No: 153233-91-1 CIPAC No: 623	(RS)-5-*tert*-butyl-2-[2-(2,6-difluorophenyl)-4,5-dihydro-1,3-oxazol-4-yl] phenetole	≥ 948 g/kg	1 June 2005	31 May 2015	Only uses as acaricide may be authorised. For the implementation of the uniform principles of Annex VI, the conclusions of the review report on etoxazole, and in particular Appendices I and II thereof, as finalised in the Standing Committee on the Food Chain and Animal Health on 3 December 2004 shall be taken into account. In this overall assessment Member States should pay particular attention to the protection of aquatic organisms. Risk mitigation measures should be applied where appropriate.
101	Tepraloxydim CAS No: 149979-41-9 CIPAC No: 608	(EZ)-(RS)-2-(1-[(2E)-3-chloroallyloxyimino]propyl)-3-hydroxy-5-perhydropyran-4-ylcyclohex-2-en-1-one	≥ 920 g/kg	1 June 2005	31 May 2015	Only uses as herbicide may be authorised. For the implementation of the uniform principles of Annex VI, the conclusions of the review report on tepraloxydim, and in particular Appendices I and II thereof, as finalised in the Standing Committee on the Food Chain and Animal Health on 3 December 2004 shall be taken into account. In this overall assessment, Member States should pay particular attention to the protection of terrestrial non-target arthropods. Risk mitigation measures should be applied where appropriate.

(*) Further details on identity and specification of active substances are provided in the review report.'

6 EUにおける登録動物薬リスト（EC理事会指令

90/2377/EEC Annex I-IIIへの収載状況）

2005年5月13日現在

European Medicines Agency
Veterinary Medicines and Inspections

London, 13 May 2005
EMEA/CVMP/765/99-Rev.13

STATUS OF MRL PROCEDURES

MRL assessments in the context of Council Regulation (EEC) No 2377/90

Background and legislative framework

In order to protect the safety of the consumer of foodstuffs of animal origin, one of the most important principles laid down in the European Union (EU) legislation with regard to the marketing authorisation of veterinary medicines is that foodstuffs obtained from animals treated with veterinary medicinal products must not contain residues which might constitute a health hazard for the consumer. Before a veterinary medicinal product intended for food producing animals can be authorised in the EU, all pharmacologically active substances contained in the product have to undergo a safety and residues evaluation, and have to be included in Annex I, II, or III of Council Regulation (EEC) No 2377/90[1].

The safety and residue evaluation in accordance with Regulation 2377/90 is carried out by the Committee for Medicinal Products for Veterinary Use (CVMP) of the European Medicines Agency (EMEA), supported by safety and residues experts, upon receipt of a valid application for the establishment of maximum residue limits (MRLs).

Substances for which definitive MRLs have been established are included in Annex I of Regulation 2377/90. MRLs can be proposed as provisional, if all aspects are not yet fully addressed. In this case the substance is inserted in Annex III with an expiry date defining for the termination of the provisional status. However, no provisional MRLs can be proposed, if major issues with regard to safety remain to be addressed, as it must be assured that residues at the proposed levels do not present a hazard to the health of the consumer. Only, once the applicant has satisfactorily answered the outstanding questions, the substance can be included in Annex I. These questions are likely to relate to the provision of fully validated analytical methods.

Where, following the evaluation, it appears that it is not necessary for the protection of public health to establish MRLs, such substance is included in Annex II. It should be noted that an entry in Annex II is not equivalent to the status "generally recognised as safe". In fact only a sub-group of Annex II substances do fall under this category. For further details on the assessment of a substance you are advised to consult the MRL Summary report of the substances concerned. Please also note that Annex II comprises a specific entry, which provides that certain substances approved in the EU as food additives with a valid E-number are considered included in Annex II without listing the substances specifically. Relevant substances falling under these provisions are e.g. vitamin C, citric acid or several sodium and potassium salts, and these substances are only mentioned in the enclosed list if an MRL application was submitted.

[1] Council Regulation (EEC) No 2377/90 of 26 June 1990 laying down a Community procedure for the establishment of maximum residue limits for veterinary medicinal products in foodstuffs of animal origin (O.J. NO L 224, 18.8.1990, p.1), as amended by Commission Regulation (EEC) No 762/92 (O.J. No. L 83, 28.3.1992, p.14), Council Regulation (EC) No 434/97 (O.J. No L 67, 7.3.1997, p. 1), and Council Regulation (EC) No 1308/99 (O.J. L 156, 23.6.1999, p.1)

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A safety and residue evaluation may also result in the recommendation to include a substance in Annex IV of Regulation 2377/90, which means that the substance is prohibited from use in veterinary medicinal products for food producing animals. Another conclusion may be that due to the deficiencies of the data provided, no recommendation for inclusion in any of the annexes could be made; the net result in the latter case is the same as an inclusion in Annex IV, as no medicinal product containing such a substance can be authorised for food producing animals in the EU.

During the period from 1992 to January 2005 over 700 "old" substances were reviewed and applications concerning 58 "new" substances and 87 extensions and modifications have been submitted to the CVMP; MRLs recommendations for inclusion in Annex, I, II or III were made for 645 substances in total. 115 substances were recommended for inclusion in Annex I of Regulation 2377/90, 513 in Annex II and 6 remain currently in Annex III. For 11 substances it was considered that their residues, at whatever limit, in foodstuffs of animal origin constitute a hazard to the health of the consumer, and they have been placed in Annex IV. For 40 substances, the CVMP was unable to make a recommendation for inclusion in any of the annexes and for further 57 substances the applicants withdrew their applications after the receipt of the list of questions.

Procedure for MRL opinions

Following the evaluation of an MRL application the CVMP issues an opinion which includes the recommendation regarding the establishment of MRLs for the substances considered and a Summary Opinion is published on the EMEA website (http://www.emea.eu.int/index/indexv1.htm). On the basis of the scientific recommendation of the CVMP for inclusion of a substance in Annex I, II, III or IV of Regulation 2377/90, the Commission prepares a draft regulation amending the respective Annex(es) accordingly. Any such Regulation requires a favourable opinion by qualified majority of the EU Member States, before the European Commission can adopt it. Once adopted, the European Commission publishes the Regulation amending the annexes of Regulation 2377/90 in the Official Journal of the European Communities. Following this publication the EMEA publishes the CVMP Summary Reports on the EMEA website: http://www.emea.eu.int/index/indexv1.htm. The European Commission services also provides access to all adopted Regulations amending the annexes of Regulation 2377/90 (http://europa.eu.int/eur-lex/) and a non-official consolidated list of the annexes of the Regulation listing all MRLs established, on the following web-site: (http://pharmacos.eudra.org/F2/mrl/index.htm)..

Substances with MRLs assessments in the EU

Attached is an alphabetical list of all substances included in Annex I, II, III or IV of Regulation 2377/90 with the indication of the respective annex and the number of the Regulation which established these MRLs. In addition, the list includes substances for which MRL recommendations have been made by the CVMP and are now undergoing the decision-making procedure by the European Commission . The list also includes the substances for which the CVMP concluded that due to insufficient data provided a recommendation for inclusion of the substance in Annex I, II, III of Regulation 2377/90 could not be made.

Any enquiries regarding this connection may be directed to the attention of Dr Kornelia Grein, Head of Sector (Safety of Veterinary Medicines) at the EMEA, 7 Westferry Circus, Canary Wharf, London E14 4HB, telephone +44 20 7 418 8432; email: kornelia.grein@emea.eu.int

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MRL assessments in the EU in the context of Council Regulation (EEC) No 2377/90

Substance	Status	Regulation amending Annex of Regulation 2377/90
Abamectin	Annex I	Reg. 3425/93; 2728/99; 869/2002
Absinthium extract	Annex II	Reg. 2796/95
Acacia gum (gum arabica)	Annex II (E-number 414)	Reg. 2034/96
Acetyl cysteine	Annex II	Reg. 1430/94
Acetylisovaleryltylosin (porcine)	Annex I	Regs 1286/2000 ; 77/2002
Acetylisovaleryltylosin (poultry)	Annex III (01.07.2006) – Annex I proposal	Reg. 75/2005
Acetylmethionine	Annex II	Reg. 2796/95
Acetylsalicylic acid	Annex II	Regs 750/2001; 1029/2003
Acetylsalicylic acid DL-lysine	Annex II	Regs 750/2001; 1029/2003
Adenosine	Annex II	Reg. 1931/99
Adipic acid	Annex II (E-number 355)	Reg. 2034/96
Adonis vernalis	Annex II	Reg. 998/99
Aesculus hippocastanum	Annex II	Reg. 2728/99
Agnus castus	Annex II	Reg. 2728/99
Ailanthus altissima	Annex II	Reg. 2728/99
Alanine	Annex II	Reg. 1931/99
Albendazole	Annex I	Regs 3093/92; 1798/96; 1191/98; 1646/2004
Albendazole oxide	Annex I	Regs 17/97; 613/98; 2393/99
Alfacalcidol	Annex II	Reg. 1917/98
Alfaprostol	Annex II	Regs 270/97 ; 2560/98
Alginic acid	Annex II (E-number 400)	Reg. 2034/96
Allantoin	Annex II	Reg. 868/2002
Allium cepa	Annex II	Reg. 2728/99
Aloe vera gel and whole leaf extract of Aloe vera	Annex II	Reg. 2758/99
Aloes, Barbados and *Capae*	Annex II	Reg. 1931/99
Alpha-cypermethrin	Annex I	Regs 954/99; 869/2002 ; 2011/03
Altrenogest	Annex I	Regs 2584/2001; 1530/2002; 3332/2004
Aluminium	Annex II (E-number 173)	Reg. 2034/96
Aluminium distearate	Annex II	Reg. 1916/98
Aluminium hydroxide	Annex II	Reg. 2796/95
Aluminium hydroxide acetate	Annex II	Reg. 1916/98
Aluminium monostearate	Annex II	Reg. 2796/95
Aluminium phosphate	Annex II	Reg. 1916/98
Aluminium potassium sulfate	Annex II (E-number 522)	Reg. 2034/96
Aluminium salicylate, basic	Annex II	Regs 1286/2000; 1937/2002
Aluminium silicate (kaolin)	Annex II (E-number 559)	Reg. 2034/96
Aluminium tristearate	Annex II	Reg. 1916/98
Aminoethanol [2-Aminoethanol]	Annex II	Reg. 1076/98
Aminoethanol glucoronate (2-Aminoethanol glucoronate)	Annex II	Reg. 2393/99
Aminoethyl dihydrogenphosphate [2-Aminoethyl dihydrogenphosphate]	Annex II	Reg. 1568/98
Amitraz	Annex I	Regs 3093/92; 1430/94; 1742/96; 1916/98; 1836/97; 2395/99; 1646/2004

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Substance	Status	Regulation amending Annex of Regulation 2377/90
Ammonium chloride	Annex II	Reg. 508/99
Ammonium hydroxide	Annex II (E-number 527)	Reg. 2034/96
Ammonium lauryl sulphate	Annex II	Reg. 2162/2001
Ammonium sulfate	Annex II	Reg. 2796/95
Amoxicillin	Annex I	Reg. 675/92
Ampicillin	Annex I	Reg. 675/92
Amprolium	Annex II	Regs 1295/2000; 1478/2001
Angelicae radix aetheroleum	Annex II	Reg. 2560/98
Anisi aetheroleum	Annex II	Reg. 2560/98
Anisi stellati fructus, standardised extracts and preparations thereof	Annex II	Reg. 2338/2000
Apis mellifica	No recommendation	
Apocynum cannabinum	Annex II	Reg. 1942/99
Apramycin (bovine)	Annex I	Regs 1838/97; 1931/99
Apramycin (ovine, porcine, chicken, rabbits)	Annex II	Regs 1838/97 ; 1931/99
Aqua levici	Annex II	Reg. 998/99
Arginine	Annex II	Reg. 1931/99
Aristolochia spp. And preparations thereof	Annex IV	Reg. 1568/98
Arnicae montana	Annex II	Reg. 2728/99
Arnicae radix	Annex II	Reg. 2728/99
Artemisia abrotanum	Annex II	Reg. 2728/99
Ascorbic acid	Annex II (E-number 300)	Reg. 2034/96
Asparginine	Annex II	Reg. 1931/99
Aspartic acid	Annex II	Reg. 1931/99
Atropa belladonna	Annex II	Reg. 889/99
Atropine	Annex II	Reg. 1943/99
Azagly-nafarelin	Annex II	Reg. 1530/2002
Azamethiphos	Annex II	Regs 1140/96 ; 1836/97 ; 1931/99
Azaperone	Annex I	Regs 675/92; 1798/96;1858/98
Bacitracin (bovine meat)	Annex II	Reg. 2686/98
Bacitracin (bovine milk and rabbits)	Annex I	Regs 953/99; 1478/2001; 544/2003
Balsamum peruvianum	Annex II	Reg. 1916/98
Baquiloprim	Annex I	Regs 1433/96; 1838/97
Barium selenate	Annex II	Reg. 2757/99
Beclomethasone dipropionate	Annex II	Reg. 2232/04
Bellis perennis	Annex II	Reg. 2728/99
Bentonite	Annex II (E-number 558)	Reg. 2034/96
Benzalkonium chloride	Annex II	Reg. 1191/98
Benzetimide hydrochloride	No recommendation	
Benzocaine	Annex II	Reg. 1569/98; 868/2002
Benzoic acid	Annex II (E-number 210)	Reg. 2034/96
Benzyl alcohol	Annex II	Reg. 1442/95
Benzyl benzoate	Annex II	Reg. 2796/95
Benzylideneacetone	No recommendation	
Benzylpenicillin	Annex I	Reg. 675/92
Benzyl-p-hydroxybenzoate	Annex II	Reg. 2796/95
Berberis vulgaris	No recommendation	
Betaine	Annex II	Reg. 121/98

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Substance	Status	Regulation amending Annex of Regulation 2377/90
Betaine glucoronate	Annex II	Reg. 2393/99
Betamethasone	Annex I	Reg. 2593/99
Biotin	Annex II	Reg. 997/99
Bismuth subcarbonate	Annex II	Reg. 1838/97
Bismuth subgallate	Annex II	Reg. 1838/97
Bismuth subnitrate	Annex II	Regs 1838/97; 1286/2000
Bismuth subsalicylate	Annex II	Reg. 1838/97
Bituminosulfonates, ammonium and sodium salts	Annex II	Reg. 2393/99
Boldo folium	Annex II	Reg. 1931/99
Boric acid and borates	Annex II	Reg. 2034/96
Bovine somatotropins	Annex II proposal	
Bromhexine	Annex II	Reg. 997/99
Bromide, sodium salt	Annex II	Reg. 1837/97
Bronopol	Annex II	Regs 2686/98; 2162/2001
Brotizolam	Annex II	Reg. 1102/95
Bryonia	No recommendation	
Buserelin	Annex II	Reg. 282/96
Butafosfan	Annex II	Regs 2728/99; 2391/2000
Butane [n-Butane]	Annex II	Reg. 1147/96
Butanilicaine	No recommendation	
Butanol [n-Butanol]	Annex II	Reg. 1442/95
Butorphanol tartrate	Annex II	Reg. 1076/98
Butyl 4-hydroxybenzoate	Annex II	Reg. 1433/96
Butylated hydroxyanisole	Annex II (E-number 320)	Reg. 2034/96
Butylated hydroxytoluene	Annex II (E-number 321)	Reg. 2034/96
Butylscopolaminium bromide	Annex II	Reg. 1958/98
Caffeine	Annex II	Reg. 282/96
Calcium acetate	Annex II	Reg. 1102/95
Calcium alginate	Annex II (E-number 404)	Reg. 2034/96
Calcium aspartate	Annex II	Reg. 1286/2000
Calcium benzoate	Annex II	Reg. 1102/95
Calcium borogluconate	Annex II	Reg. 2796/95
Calcium carbonate	Annex II	Reg. 1102/95
Calcium chloride	Annex II	Reg. 1102/95
Calcium citrate	Annex II	Reg. 2796/95
Calcium glucoheptonate	Annex II	Reg. 2686/98
Calcium gluconolactate	Annex II	Reg. 2686/98
Calcium gluconate	Annex II	Reg. 1102/95
Calcium gluconoglucoheptonate	Annex II	Reg. 2686/98
Calcium glutamate	Annex II	Reg. 2686/98
Calcium glycerophosphate	Annex II	Reg. 2908/2000
Calcium hydroxide	Annex II	Reg. 1102/95
Calcium hypophosphite	Annex II	Reg. 1102/95
Calcium maleate	Annex II	Reg. 1102/95
Calcium oxide	Annex II	Reg. 1102/95
Calcium pantothenate	Annex II	Reg. 2162/2001
Calcium phosphate	Annex II	Reg. 1102/95
Calcium polyphosphates	Annex II	Reg. 1102/95
Calcium propionate	Annex II	Reg. 1102/95
Calcium silicate	Annex II	Reg. 1102/95

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Substance	Status	Regulation amending Annex of Regulation 2377/90
Calcium stearate	Annex II	Reg. 1102/95
Calcium sulphate	Annex II	Reg. 1102/95
Calendula officinalis	Annex II	Reg. 2728/99
Calendulae flos	Annex II	Reg. 2593/99
Camphor	Annex II	Reg. 2796/95
Camphora	Annex II	Reg. 2728/99
Capsici fructus	Annex II	Reg. 2385/99
Carazolol	Annex I	Regs 675/92; 1442/95; 953/99; 1960/2000
Carbasalate calcium	Annex II	Regs 750/2001; 1029/2003
Carbetocin	Annex II	Reg. 1433/96
Carboxymethylcellulose	Annex II (E-number 466)	Reg. 2034/96
Cardamom extract	Annex II	Reg. 2796/95
Cardiospermum halicacabum	Annex II	Reg. 2728/99
Carlinae radix	Annex II	Reg. 1931/99
Carnitine	Annex II	Reg. 1931/99
Carprofen	Annex I	Regs 1311/96; 613/98; 1931/99
Carvi aetheroleum	Annex II	Reg. 2560/98
Caryophylli aetheroleum	Annex II	Reg. 2560/98
Cefacetrile (bovine meat)	Annex II	Reg. 804/99
Cefacetrile (bovine milk)	Annex I	Regs 804/99; 807/2001; 2126/2001
Cefalexin	Annex I	Reg. 2728/99
Cefalonium (bovine meat)	Annex II	Reg. 2728/99
Cefalonium (bovine milk)	Annex I	Reg. 1931/99; 1322/2001; 61/2003
Cefapirin	Annex I	Regs 270/97; 804/99; 1553/2001
Cefazolin (bovine, ovine and caprine meat)	Annex II	Regs 270/97 ; 121/98
Cefazolin (bovine, ovine and caprine milk)	Annex I	Regs 270/97; 121/98
Cefoperazone (bovine milk)	Annex I	Regs 1943/99; 807/2001
Cefoperazone (bovine meat)	Annex II	Reg. 1943/99
Cefquinome (bovine, porcine, Equidae)	Annex I	Regs 895/93; 282/96; 954/99; 1931/99; 2145/2003
Ceftiofur (bovine, porcine)	Annex I	Regs 1837/97; 804/99, 1752/2002
Cefuroxim	No recommendation	
Centellae asiaticae extractum	Annex II	Reg. 804/99
Cetostearyl alcohol	Annex II	Reg. 2686/98
Cetrimide	Annex II	Reg. 1742/96
Chelidonii herba	No recommendation	
Chelidonium majus	No recommendation	
Chloramphenicol	Annex IV	Regs 675/92; 1430/94
Chlorhexidine	Annex II	Reg. 17/97
Chlormadinone acetate	Annex I	Reg. 2584/2001
Chlorocresol	Annex II	Reg. 1742/96
Chloroform	Annex IV	Reg. 270/97
Chlorphenamine	Annex II	Reg. 2393/99
Chlorpromazine	Annex IV	Reg. 17/97
Chlortetracycline	Annex I	Regs. 3426/93; 281/96
Choline	Annex II	Reg. 1931/99
Chrysanthemi cinerarifolii flos	Annex II	Reg. 1568/98

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Substance	Status	Regulation amending Annex of Regulation 2377/90
Chymotrypsin	Annex II	Reg. 1931/99
Cimicifugae racemosae rhizoma	Annex II	Reg. 2593/99
Cinchonae cortex, standardised extracts and preparations thereof	Annex II	Reg. 2338/2000
Cinnamomi cassiae aetheroleum	Annex II	Reg. 2560/98
Cinnamomi cassiae cortex, standardised extracts and preparations thereof	Annex II	Reg. 2338/2000
Cinnamomi ceylanici aetheroleum	Annex II	Reg. 2560/98
Cinnamomi ceylanici cortex, standardised extracts and preparations thereof	Annex II	Reg. 2338/2000
Citri aetheroleum	Annex II	Reg. 2560/98
Citric acid	Annex II (E-number 330)	Reg. 2034/96
Citronellae aetheroleum	Annex II	Reg. 2560/98
Citrulline	Annex II	Reg. 1931/99
Clavulanic acid	Annex I	Regs 749/97; 1943/99; 1553/2001
Clazuril	Annex II	Reg. 1916/98
Clenbuterol	Annex I	Regs 1312/96; 2391/2000
Cloprostenol	Annex II	Regs 1838/97; 2232/2004
Cloprostenol [R, RS-Cloprostenol]	Annex II	Regs 1838/97; 2232/2004
Clorsulon	Annex I	Regs 1147/96; 1942/99
Closantel	Annex I	Reg. 2901/93
Cloxacillin	Annex I	Reg. 675/92
Cobalt carbonate	Annex II	Reg. 1916/98
Cobalt dichloride	Annex II	Reg. 1916/98
Cobalt gluconate	Annex II	Reg. 1916/98
Cobalt oxide	Annex II	Reg. 1916/98
Cobalt sulphate	Annex II	Reg. 1916/98
Cobalt trioxide	Annex II	Reg. 1916/98
Coco alkyl dimethyl betaines	Annex II	Reg. 1916/98
Colchicine	Annex IV	Reg. 1311/96
Colistin	Annex I	Regs 282/96; 2338/2000; 1181/2002
Collinsonia canadensis	No recommendation	
Condurango cortex, standardised extracts and preparations thereof	Annex II	Reg. 2338/2000
Convallaria majalis	Annex II	Reg. 998/99
Copper chloride	Annex II	Reg. 2560/98
Copper gluconate	Annex II	Reg. 2560/98
Copper heptanoate	Annex II	Reg. 2560/98
Copper methionate	Annex II	Reg. 2560/98
Copper oxide	Annex II	Reg. 2560/98
Copper sulphate	Annex II	Reg. 2560/98
Coriandri aetheroleum	Annex II	Reg. 2560/98
Corticotrophin	Annex II	Reg. 1191/98
Coumafos	Annex I	Regs 1931/99; 1478/2001
Crataegus	Annex II	Reg. 2728/99
Cupressi aetheroleums	Annex II	Reg. 1931/99
Cyfluthrin	Annex I	Reg. 1958/98; 807/2001
Cyhalothrin	Annex I	Reg. 807/2001
Cymiazole	Annex III (01.07.2001) – Expired	Regs 2017/96; 1931/99

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Substance	Status	Regulation amending Annex of Regulation 2377/90
Cypermethrin	Annex I	Regs 954/99 ; 77/2002; 869/2002; 1029/2003; 1490/03; 1646/2004
Cyromazine	Annex I	Regs 2593/99; 1478/2001
Cysteine	Annex II	Reg. 1931/99
Cytidine	Annex II	Reg. 1931/99
Danofloxacin	Annex I	Regs 1442/95; 1837/97; 121/98; 1942/99; 953/99; 1942/99; 1181/2002
Dapsone	Annex IV	Regs 675/92; 3426/93
Decoquinate	Annex II	Regs 282/96; 2338/2000
Deltamethrin	Annex I	Regs 1942/99; 1960/2000; 1815/2001; 2162/2001; 1646/2004
Deltamethrin (chicken)	Annex III (01.07.2003) - Expired	Regs 1942/99; 1815/2001
Dembrexine	Annex II	Reg. 2010/96
Denaverine hydrochloride	Annex II	Reg. 1191/98
Deslorelin acetate	Annex II	Reg. 1530/2002
Detomidine	Annex II	Reg. 1102/95
Dexamethasone	Annex I	Regs 1441/95; 749/97; 1837/97; 1646/2004
Dexpanthenol	Annex II	Reg. 869/2002
Diazinon	Annex I	Reg. 1442/95
Diclazuril	Annex II	Regs 2010/96; 1101/2004
Diclofenac	Annex I	Reg. 324/2004
Dicloxacillin	Annex I	Reg. 675/92
Dicopper oxide	Annex II	Reg. 2560/98
Dicyclanil	Annex I	Regs 2393/99; 1960/2000; 2391/2000
Diethyl phthalate	Annex II	Reg. 1311/96
Diethyl sebacate	Annex II	Reg. 2796/95
Diethylene glycol monoethyl ether	Annex II	Reg. 2728/98
Difloxacin	Annex I	Regs 1311/96; 749/97, 997/99; 2908/2000; 1181/2002
Diflubenzuron	Annex I	Regs 997/99; 2593/99
Dihydrostreptomycin	Annex I	Regs 1140/96; 1960/2000; 1530/2002
Diiodo-L-thyrosine [3,5-Diiodo-L-thyrosine]	Annex II	Reg. 2757/99
Dimanganese trioxide	Annex II	Reg. 2692/98
Dimethicone	Annex II	Reg. 2796/95
Dimethyl acetamide	Annex II	Reg. 2796/95
Dimethyl phthalate	Annex II	Reg. 1311/96
Dimethyl sulfoxyde	Annex II	Reg. 2796/95
Dimetridazole	Annex IV	Regs 675/92 ; 3426/93 ; 1798/95
Dinoprost	Annex II	Reg. 1569/98
Dinoprost tromethamine	Annex II	Reg. 1442/95
Diphenhydramine (di)hydrochloride	No recommendation	
Diprophylline	Annex II	Reg. 1916/98
Dodecylgallate	Annex II (E-number 312)	Reg. 2034/96
Doramectin	Annex I	Regs 1430/94; 270/97;1836/97; 2728/99; 1478/2001
Doxapram	Annex II	Reg. 1931/99
Doxycycline	Annex I	Regs 17/97; 1000/98

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Substance	Status	Regulation amending Annex of Regulation 2377/90
D-Phe^6-luteinizing hormone releasing hormone	Annex II	Reg. 716/97
Drosera	No recommendation	
Echinacea	Annex II	Reg. 2728/99
Echinacea purpurea	Annex II	Reg. 1568/98
Emamectin	Annex I	Regs 1931/99; 1490/2003
Enilconazole	Annex II	Reg. 804/99
Enrofloxacin	Annex I	Regs 2901/93; 2728/98; 2593/99; 1181/2002
Ephedrine (hydrochloride)	No recommendation	
Epinephrine	Annex II	Reg. 2796/95
Eprinomectin	Annex I	Regs 17/97; 1934/99
Ergometrine maleate	Annex II	Reg. 2593/99
Erythromycin	Annex I	Regs 1442/95, 2338/2000; 1181/2002
Etamiphylline camsylate	Annex II	Reg. 2010/96
Etamsylate	Annex II	Reg. 804/99
Ethanol	Annex II	Reg. 1442/95
Ethyl lactate	Annex II	Reg. 1311/96
Ethyl oleate	Annex II	Reg. 2796/95
Ethyl-1, 3-hexanediol [2-Ethyl-1, 3-hexanediol]	No recommendation	
Ethylenediaminetetraacetic acid and salts (EDTA)	Annex II	Reg. 2796/95
Ethyl-p-hydroxybenzoate	Annex II (E-number 214)	Reg. 2034/96
Etilefrine hydrochloride	Annex II proposal – Rejected by the Commission	
Etiproston tromethamine	Annex II	Reg. 2901/93
Eucalypti aetheroleum	Annex II	Reg. 2728/98
Eucalyptol	Annex II	Reg. 2796/95
Eucalyptus globulus	Annex II	Reg. 2728/99
Euphrasia officinalis	Annex II	Reg. 2728/99
Fatty acids	Annex II (E-number 570)	Reg. 2034/96
Febantel	Annex I	Regs. 675/92; 1441/95; 1837/97; 1646/2004
Fenbendazole	Annex I	Regs 675/92; 1441/95; 1837/97; 1646/2004
Fenpipramide hydrochloride	Annex II	Reg 1942/99
Fenvalerate	Annex III (01.07.2006)	Regs 1937/2002; 1875/2004
Fertirelin acetate	Annex II	Reg. 3425/93
Florfenicol	Annex I	Regs 2703/94; 613/98; 1942/99; 2385/99; 1322/2001; 1181/2002
Fluazuron	Annex III proposal	
Flubendazole	Annex I	Regs 895/93; 1798/96; 1000/98; 2385/99
Flugestone acetate (sheep and goats meat)	Annex III (01.01.2008)	Reg. 665/2003
Flugestone acetate (sheep and goats milk)	Annex I	Regs 2584/2001; 739/2003
Flumequine	Annex I	Regs. 17/97; 2728/99; 2338/2000; 1181/2002
Flumethrin (bovine, ovine)	Annex I	Regs 2686/98; 2391/2000
Flumethrin (honey)	Annex II	Reg. 2686/98
Flunixin	Annex I	Reg. 2728/99; 2908/2000

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Substance	Status	Regulation amending Annex of Regulation 2377/90
Foeniculi aetheroleum	Annex II	Reg. 2560/98
Folic acid	Annex II	Reg. 121/98
Follicle Stimulating Hormone (natural FSH from all species and their synthetic analogues)	Annex II	Reg. 2796/95
Formaldehyde	Annex II	Reg. 2796/95
Formic acid	Annex II	Reg. 2796/95
Frangulae cortex, standardised extracts and preparations thereof	Annex II	Reg. 2338/2000
Fumagillin	No recommendation	
Furazolidone	Annex IV	Regs 2901/93; 1442/95
Furosemide	Annex II	Reg. 2728/99
Gentamicin	Annex I	Regs 1140/96; 1960/2000; 868/2002
Gentianae radix, standardised extracts and preparations thereof	Annex II	Reg. 2338/2000
Ginkgo biloba	Annex II	Reg. 2728/99
Ginseng	Annex II	Reg. 2728/99
Glutamic acid	Annex II	Reg. 1931/99
Glutamine	Annex II	Reg. 1931/99
Glutaraldehyde	Annex II	Reg. 2796/95
Glycerol	Annex II (E-number 422)	Reg. 2034/96
Glycerol formal	Annex II	Reg. 17/97
Glycine	Annex II	Reg. 1931/99
Gonadotrophin releasing hormone	Annex II	Reg. 2703/94
Guaiacol	Annex II	Reg. 2796/95
Guanosine	Annex II	Reg. 1931/99
Halofuginone	Annex I	Regs 997/99; 2908/2000
Hamamelis virginiana	Annex II	Regs 1568/98; 2728/99
Harpagophytum procumbens	Annex II	Reg. 2728/99
Harunga madagascariens (1:100)	Annex II	Reg. 1942/99
Heparin and salts	Annex II	Reg. 2796/95
Heptaminol	Annex II	Reg. 1311/96
Hesperidin	Annex II	Reg. 17/97
Hesperidin methyl chalcone	Annex II	Reg. 17/97
Hexetidin	Annex II	Reg. 1916/9
Hippocastini semen	Annex II	Reg. 2385/99
Histidine	Annex II	Reg. 1931/99
Human Chorionic Gonadotrophin (natural HCG and its synthetic analogues)	Annex II	Regs 1102/95 ; 2796/95
Human menopausal urinary gonadotrophin	Annex II	Reg. 3425/93
Humic acid and its sodium salt	Annex II	Reg. 2393/99
Hyaluronic acid	Annex II	Reg. 1931/99
Hydrochloric acid	Annex II	Reg. 1442/95
Hydrochlorothiazide	Annex II	Reg. 1942/99
Hydrocortisone	Annex II	Reg. 1917/98
Hydrogen peroxide	Annex II	Regs 895/93 ; 1433/96
Hydroxyethylsalicylate	Annex II	Reg. 1752/2002
Hydroxyquinoline [8-Hydroxyquinoline]	Annex II	Reg. 2728/98

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Substance	Status	Regulation amending Annex of Regulation 2377/90
Hyperici oleum	Annex II	Reg. 2728/98
Hypericum perforatum	Annex II	Reg. 2728/99
Imidocarb	Annex I	Regs 953/99; 2162/2001; 2145/2003
Inosine	Annex II	Reg. 1931/99
Inositol	Annex II	Reg. 1931/99
Iodine and iodine inorganic compounds including: – Sodium and potassium – iodide – Sodium and potassium – iodate – Iodophors	Annex II	Reg. 955/94
Iodine organic compounds – Iodoform – Polyvinylpyrrolidine – iodine	Annex II	Reg. 955/94
Iron ammonium citrate	Annex II	Reg. 2796/95
Iron dextran	Annex II	Reg. 2796/95
Iron dichloride	Annex II	Reg. 1916/98
Iron glucoheptonate	Annex II	Reg. 2796/95
Iron gluconate	Annex II (E-number 579)	Reg. 2034/96
Iron sulphate	Annex II	Reg. 1916/98
Isobutane	Annex II	Reg. 1147/96
Isoflupredone	No recommendation	
Isoflurane	Annex II	Reg. 426/98
Isoleucine	Annex II	Reg. 1931/99
Isopropanol	Annex II	Reg. 2796/95
Isoxsuprine	Annex II	Reg. 748/97
Ivermectin	Annex I	Regs 675/92; 2901/93; 716/97; 2728/98
Jecoris oleum	Annex II	Reg. 2593/99
Josamycin	No recommendation for final MRLs	Regs 282/96; 953/99; 2338/2000
Juniperi fructus	Annex II	Reg. 2385/99
Kanamycin	Annex I	Regs 1931/99; 2162/2001; 324/2004
Ketamine	Annex II	Reg. 1191/98
Ketanserin tartrate	Annex II	Reg. 3425/93
Ketoprofen	Annex II	Regs 282/96 ; 1742/96
Lachnanthes tinctoria	Annex II	Reg. 2728/99
Lactic acid	Annex II	Reg. 995/94
Lanolin	Annex II	Reg. 2796/95
Lasalocid sodium	Annex I proposal	
Lauri folium aetheroleum	Annex II	Reg. 2385/99
Lauri fructus	Annex II	Reg. 2385/99
Lavandola aetheroleum	Annex II	Reg. 1931/99
Lecirelin	Annex II	Reg. 1442/95
Lespedeza capita	Annex II	Reg. 2686/98
Leucine	Annex II	Reg. 1931/99
Levamisole	Annex I	Regs 675/92; 3059/94
Levomethadon	Annex II	Reg. 1942/99
Levothyroxine	Annex II	Reg. 2757/99
Lidocaine hydrochloride	Annex II	Reg. 2728/99
Lincomycin	Annex I	Regs 804/99; 807/2001; 1181/2002

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Substance	Status	Regulation amending Annex of Regulation 2377/90
Linear alkyl benzene sulphonic acids	Annex II	Reg. 807/2001; 75/2005
Lini oleum	Annex II	Reg. 121/98
Lobaria pulmonaria	Annex II	Reg. 2728/99
Lobeline	Annex II	Reg. 1742/96
Lophophytum leandri	No recommendation	
Luprostiol	Annex II	Reg. 1838/97
Luteinizing Hormone (natural LH from all species and their synthetic analogues)	Annex II	Reg. 2796/95
Lysine	Annex II	Reg. 1931/99
Magnesium	Annex II	Reg. 1147/96
Magnesium acetate	Annex II	Reg. 1147/96
Magnesium aluminium silicate	Annex II	Reg. 1147/96
Magnesium asparate	Annex II	Reg. 1147/96
Magnesium carbonate	Annex II	Reg. 1147/96
Magnesium chloride	Annex II	Reg. 2796/95
Magnesium citrate	Annex II	Reg. 1147/96
Magnesium gluconate	Annex II	Reg. 2796/95
Magnesium glutamate	Annex II	Reg. 1147/96
Magnesium glycerophosphate	Annex II	Reg. 1147/96
Magnesium hydroxide	Annex II	Reg. 1147/96
Magnesium hypophosphite	Annex II	Reg. 2796/95
Magnesium orotate	Annex II	Reg. 1147/96
Magnesium oxide	Annex II	Reg. 1147/96
Magnesium phosphate	Annex II	Reg. 1147/96
Magnesium stearate	Annex II	Reg. 1147/96
Magnesium sulphate	Annex II	Reg. 1147/96
Magnesium trisilicate	Annex II	Reg. 1147/96
Majorana herba	Annex II	Reg. 2686/98
Malic acid	Annex II	Reg. 1442/95
Manganese carbonate	Annex II	Reg. 2692/98
Manganese chloride	Annex II	Reg. 2692/98
Manganese gluconate	Annex II	Reg. 2692/98
Manganese glycerophosphate	Annex II	Reg. 2692/98
Manganese oxide	Annex II	Reg. 2692/98
Manganese pidolate	Annex II	Reg. 2692/98
Manganese ribonucleate	Annex II	Reg. 2692/98
Manganese sulphate	Annex II	Reg. 2692/98
Mannitol	Annex II	Reg. 2796/95
Marbofloxacin	Annex I	Regs 2017/96; 1568/98; 2338/2000
Matricaria recutita	Annex II	Reg. 1286/2000
Matricariae flos [Chamomilla]	Annex II	Reg. 1958/98
Mebendazole	Annex I	Regs 2728/99; 1680/2001
Mecillinam	Annex II	Reg. 2728/98
Meclofenamic acid	No recommendation	
Medicago sativa	Annex II	Reg. 2686/98
Medroxyprogesterone acetate	Annex II	Reg. 270/97
Melatonin	Annex II	Reg. 955/94
Melissae aetheroleum	Annex II	Reg. 804/99

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Substance	Status	Regulation amending Annex of Regulation 2377/90
Melissae folium	Annex II	Reg. 1958/98
Meloxicam	Annex I	Regs 1569/98; 2393/99; 1274/2001; 1530/2002
Menadione [Vitamin K3]	Annex II	Reg. 2686/98
Menbutone	Annex II	Reg. 17/97
Menthae arventis aetheroleum	Annex II	Reg. 2162/2001
Menthae piperitae aetheroleum	Annex II	Reg. 2560/98
Menthol	Annex II	Reg. 1311/96
Mepivacaine	Annex II	Reg. 2593/99
Mercaptamine hydrochloride	Annex II	Reg. 997/99
Metamizole	Annex I	Reg. 2728/99; 1322/2001; 2011/2003
Metesculetol sodium	No recommendation	
Methionine	Annex II	Reg. 1931/99
Methyl nicotinate	Annex II	Reg. 2728/98
Methyl salicylate	Annex II	Reg. 1286/2000
Methylbenzoate	Annex II	Reg. 2796/95
Methyl-p-hydroxybenzoate	Annex II (E-number 218)	Reg. 2034/96
Methylprednisolone	Annex I	Regs 1286/2000; 77/2002
Methyl-pyrrolidone [1-Methyl-pyrrolidone]	Annex II	Reg. 804/99
Metrifonate	No recommendation	
Metronidazol	Annex IV	Reg. 613/98
Millefolii herba	Annex II	Reg. 1958/98
Mineral hydrocarbons, low to high viscosity including microcrystalline waxes, approximately C10-C60; aliphatic, branched aliphatic and salicyclic compounds	Annex II	Reg. 2804/95
Monothioglycerol	Annex II	Reg. 2796/95
Montanide	Annex II	Reg. 2796/95
Morantel	Annex I -	Reg. 997/99; 1322/2001; 1851/2004
Moxidectin	Annex I	Regs 2703/94; 748/97; 613/98; 1942/99; 1553/2001; 75/2005
Moxidectin (ovine milk)	Annex I proposal	
Myglyol	Annex II	Reg. 2796/95
Myristicae aetheroleum	Annex II	Reg. 2560/98
Nafcillin	Annex I	Regs 1850/97; 804/99; 807/2001; 546/2004
Natamycin	Annex II	Reg. 1568/98
Neomycin (including framycetin)	Annex I	Regs 1140/96; 1960/2000; 1181/2002
Neostigmine	Annex II	Reg. 716/97
Netobimin	Annex I	Regs 1102/95; 1837/97; 807/2001
Niauli aetheroleum	No recommendation	
Nickel gluconate	Annex II	Reg. 2686/98
Nickel sulphate	Annex II	Reg. 2686/98
Nicoboxil	Annex II	Reg. 2728/98
Nitrofurans (except furazolidone)	Annex IV	Reg. 2901/93
Nitroxynil	Annex I	Reg. 997/99
Nonivamide	Annex II	Reg. 2728/98

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Substance	Status	Regulation amending Annex of Regulation 2377/90
Norgestomet	Annex III (01.01.2008) – Annex I proposal	Reg. 665/2003
Novobiocin (bovine meat)	Annex II	Reg. 2593/99
Novobiocin (bovine milk)	Annex I	Reg. 2593/99
Oenanthe aquatica	No recommendation	
Oestradiol-17ß	Annex II	Reg. 3059/94
Okoubaka aubrevillei	Annex II	Reg. 2728/99
Oleyloleat	Annex II	Reg. 2686/98
Omeprazole	Annex II	Reg. 1937/2002
Opium tincture	No recommendation	
Orgotein	Annex II	Reg. 2796/95
Ornitine	Annex II	Reg. 1931/99
Orotic acid	Annex II	Reg. 1931/99
Oxacillin	Annex I	Reg. 675/92
Oxalic acid	Annex II	Reg. 546/2004
Oxfendazole	Annex I	Regs 675/92; 1441/95; 1837/97; 1646/2004
Oxibendazole	Annex I	Regs 895/93; 1798/96; 1000/98
Oxidation products of *terebinthinae oleum*	Annex II	Reg. 1916/98
Oxolinic acid	Annex I	Regs 804/99; 807/2001; 739/2003
Oxolinic acid (bovine)	Annex III (01.01.2006) – Annex I proposal	Reg. 546/2004
Oxyclozanide	Annex I	Regs 997/99; 2338/2000; 1181/2002; 1646/2004
Oxytetracycline	Annex I	Regs 3426/93; 281/96
Oxytocin	Annex II	Reg. 1441/95
Pancreatin	Annex II	Reg. 1742/96
Papain	Annex II	Reg. 1147/96
Papaverine	Annex II	Reg. 1147/96
Paracetamol	Annex II	Reg. 2393/99
Parconazole	Annex II	Reg. 953/99
Paromomycin (Aminosidine)	Annex I	Regs 2017/96; 2338/2000; 1181/2002
Patent Blue V	Annex II (E-number 131)	Reg. 2034/96
Pectin	Annex II (E-number 440)	Reg. 2034/96
Penethamate	Annex I	Regs 1311/96; 2034/96; 121/98; 2757/99
Pentoxyverine	No recommendation	
Pepsin	Annex II	Reg. 1931/99
Peracetic acid	Annex II	Reg. 1433/96
Permethrin	Annex I	Reg. 1295/2000; 807/2001; 61/2003
Phenazone	No recommendation	
Phenol	Annex II	Reg. 1147/96
Phenoxymethyl penicillin (pigs)	Annex I	Reg. 1286/2000
Phenoxymethyl penicillin (poultry)	Annex I proposal	Reg. 1286/2000
Phenylalanine	Annex II	Reg. 1931/99
Phenylbutazone	No recommendation	
Phloroglucinol	Annex II	Reg. 1311/96
Phosmet	No recommendation	
Phosphoric acid	Annex II (E-number 338)	Reg. 2034/96

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Substance	Status	Regulation amending Annex of Regulation 2377/90
Phoxim	Annex I	Regs 2385/99; 2391/2000; 807/2001
Phoxim (chicken)	Annex III (01.07.05) – Annex I proposal	Reg. 2011/2003
Phytolacca americana	Annex II	Reg. 2757/99
Phytomenadione [Vitamin K1]	Annex II	Reg. 2686/98
Piperazine (porcine, chicken eggs)	Annex I	Regs 2593/99; 1478/2001; 868/2002
Piperazine dihydrochloride (chicken meat)	Annex II	Reg. 2593/99
Piperonyl butoxide	Annex II	Reg. 1931/99
Pirlimycin	Annex I	Regs 953/99; 2338/2000
Polaxalene	Annex II	Reg. 2796/95
Policresulene	Annex II	Reg. 1147/96
Poloxamer	Annex II	Reg. 2796/95
Polyethylene glycol stearates with 8-40 oxyethylene units	Annex II	Reg. 1916/98
Polyethylene glycol-15-hydroxystearate	Annex II	Reg. 1916/98
Polyethylene glycol-7-glyceryl-cocoate	Annex II	Reg. 1916/98
Polyethylene glycols (molecular weight ranging from 200 to 10.000)	Annex II	Reg. 1147/96
Polymixin B sulphate	No recommendation	
Polyoxyethylene sorbitan monolaurate (polysorbate 20)	Annex II (E-number 432)	Reg. 2034/96
Polyoxyethylene sorbitan monooleate (polysorbate 80)	Annex II (E-number 433)	Reg. 2034/96
Polyoxyethylene sorbitan monopalmitate (polysorbate 40)	Annex II (E-number 434)	Reg. 2034/96
Polyoxyethylene sorbitan monostearate (polysorbate 60)	Annex II (E-number 435)	Reg. 2034/96
Polyoxyethylene sorbitan tristearate (polysorbate 65)	Annex II (E-number 436)	Reg. 2034/96
Polyoxyl castor oil with 30 to 40 oxyethylene units	Annex II	Reg. 2593/99
Polyoxyl hydrogenated castor oil with 40 to 60 oxyethylene units (Fatty acid polyethylene glycol ester)	Annex II	Reg. 2593/99
Polysorbate 80	Annex II	Reg. 2796/95
Polysulphated glycosaminoglycan	Annex II	Reg. 2034/96
Polyvinylpyrrolidone	Annex II (E-number 1201)	Reg. 2034/96
Populeum ointment	No recommendation	
Potassium acetate	Annex II (E-number 261)	Reg. 2034/96
Potassium alginate	Annex II (E-number 402)	Reg. 2034/96
Potassium bromide	Annex II	Reg. 1931/99
Potassium carbonates	Annex II (E-number 500)	Reg. 2034/96
Potassium chloride	Annex II (E-number 508)	Reg. 2034/96
Potassium citrates	Annex II (E-number 332)	Reg. 2034/96
Potassium DL-aspartate	Annex II	Reg. 613/98
Potassium glucuronate	Annex II	Reg. 613/98
Potassium glycerophosphate	Annex II	Reg. 613/98
Potassium metabisulphite	Annex II (E-number 224)	Reg. 2034/96
Potassium nitrate	Annex II	Reg. 613/98
Potassium phosphates	Annex II (E-number 340)	Reg. 2034/96
Potassium selenate	Annex II	Reg. 1000/98

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Substance	Status	Regulation amending Annex of Regulation 2377/90
Praziquantel	Annex II	Regs 748/97; 1076/98; 997/99
Prednisolone	Annex I	Reg. 2535/2000
Pregnant Mare Serum Gonadotrophin	Annex II	Reg. 3059/94
Prethcamide	Annex II	Reg. 1916/98
Procaine	Annex II	Reg. 1076/98
Progesterone	Annex II	Reg. 1837/2003
Proline	Annex II	Reg. 1931/99
Propane	Annex II	Reg. 1147/96
Propetamphos	Annex III (01.01.2001) – Expired	Reg. 2728/99
Propylene glycol	Annex II	Reg. 270/97
Propyleneglycol alginate (Propane-1,2-diol alginate)	Annex II (E-number 405)	Reg. 2034/96
Propyl-p-hydroxybenzoate	Annex II (E-number 216)	Reg. 2034/96
Prunus laurocerasus	Annex II	Reg. 2728/99
Pulsatilla pratensis	No recommendation	
Pyrantel embonate	Annex II	Reg. 997/99
Pyrethrum extract	Annex II	Reg. 1568/98
Pyrrolidone [2-Pyrrolidone]	Annex II	Reg. 2686/98
Quatresin	Annex II	Reg. 17/97
Quercus cortex	Annex II	Reg. 1958/98
Quillaia saponins	Annex II	Reg. 1433/96
Rafoxanide	Annex I	Regs 2728/99; 1478/2001
Ramifenazone	No recommendation	
Rhamni purshiani cortex	No recommendation	
Rhei radix	Annex II	Reg. 1286/2000
Ricini oleum	Annex II	Reg. 1916/98
Rifaximin (meat)	Annex II	Regs 2034/96; 2560/98
Rifaximin (bovine milk)	Annex I	Regs 2034/96; 1191/98
Romifidine	Annex II	Reg. 1102/95
Ronidazole	Annex IV	Regs 675/92; 3426/93
Rosmarini aetheroleum	Annex II	Reg. 2560/98
Rosmarini folium	Annex II	Reg. 1958/98
Roxarsone	No recommendation	
Ruscus aculeatus	Annex II	Reg. 2385/99
Ruta graveolens	Annex II	Reg. 2385/99
Salicylic acid	Annex II	Reg. 1286/2000
Salviae folium	Annex II	Reg. 1958/98
Sambuci flos	Annex II	Reg. 1958/98
Sarafloxacin	Annex I	Regs 1441/95; 1850/97; 1568/98
Secalis cornuti extractum	No recommendation	
Selenicerus grandiflorus	Annex II	Reg. 1942/99
Serenoa repens	Annex II	Reg. 2728/99
Serine	Annex II	Reg. 1931/99
Serotonin	Annex II	Reg. 2796/95
Silicon dioxide	Annex II (E-number 551)	Reg. 2034/96
Silybum marianum	Annex II	Reg. 2728/99
Sinapis semen	Annex II	Reg. 2686/98
Sodium 2-methyl-2-phenoxypropanoate	Annex II	Reg. 2728/98
Sodium acetate	Annex II (E-number 262)	Reg. 2034/96

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Substance	Status	Regulation amending Annex of Regulation 2377/90
Sodium acetylsalicylate	Annex II	Regs 750/2001; 1029/2003
Sodium alginate	Annex II (E-number 401)	Reg. 2034/96
Sodium benzyl 4-hydroxybenzoate	Annex II	Reg. 1433/96
Sodium bicarbonate	Annex II (E-number 500)	Reg. 2034/96
Sodium boroformiate	Annex II	Reg. 2338/2000
Sodium butyl 4-hydroxybenzoate	Annex II	Reg. 1433/96
Sodium cetostearyl sulphate	Annex II	Reg. 2686/98
Sodium chloride	Annex II	Reg. 2796/95
Sodium chlorite	Annex II	Reg. 955/94
Sodium chromoglycate	Annex II	Reg. 2796/95
Sodium citrates	Annex II (E-number 331)	Reg. 2034/96
Sodium cyclamate	Annex II (E-number 952)	Reg. 2034/96
Sodium dichloroisocyanurate	Annex II	Reg. 1442/95
Sodium dioctylsulfosuccinate	Annex II	Reg. 2796/95
Sodium ethyl-p-hydroxybenzoate	Annex II (E-number 215)	Reg. 2034/96
Sodium formaldehydesulphoxylate	Annex II	Reg. 2796/95
Sodium gluconate	Annex II (E-number 576)	Reg. 2034/96
Sodium glycerophosphate	Annex II	Reg. 997/99
Sodium hypophosphite	Annex II	Reg. 2686/98
Sodium lactate	Annex II (E-number 325)	Reg. 2034/96
Sodium laurylsulphate	Annex II	Reg. 2796/95
Sodium methyl-p-hydroxybenzoate	Annex II (E-number 219)	Reg. 2034/96
Sodium phosphates	Annex II (E-number 339)	Reg. 2034/96
Sodium propionate	Annex II	Reg. 2338/2000
Sodium propyl-p-hydroxybenzoate	Annex II (E-number 217)	Reg. 2034/96
Sodium pyrosulphite	Annex II	Reg. 2796/95
Sodium salicylate	Annex II	Regs 1286/2000; 1875/2004
Sodium selenate	Annex II	Reg. 1000/98
Sodium selenite	Annex II	Reg. 1000/98
Sodium stearate	Annex II	Reg. 2796/95
Sodium thiosulphate	Annex II	Reg. 2796/95
Solidago virgaurea	Annex II	Reg. 2728/99
Somatosalm	Annex II	Reg. 211/97
Sorbic acid	Annex II (E-number 200)	Reg. 2034/96
Sorbitan monolaurate	Annex II (E-number 493)	Reg. 2034/96
Sorbitan monooleate	Annex II (E-number 494)	Reg. 2034/96
Sorbitan monopalmitate	Annex II (E-number 495)	Reg. 2034/96
Sorbitan monostearate	Annex II (E-number 491)	Reg. 2034/96
Sorbitan tristearate	Annex II (E-number 492)	Reg. 2034/96
Sorbitan sesquioleate	Annex II	Reg. 2232/2004
Spectinomycin (bovine, porcine, chicken)	Annex I	Regs 3059/94; 1568/98; 2728/99; 1960/2000; 869/2002; 1181/2002
Spiramycin	Annex I	Regs 675/92; 1442/95
Streptomycin	Annex I	Regs 1140/96; 1530/2002
Strychni semen [Nux vomica]	Annex II	Regs 2385/99; 1960/2000
Strychnine	Annex II	Reg. 804/99
Sulfoguaiacol	Annex II	Reg. 1931/99
Sulfonamide group	Annex I	Regs 675/92; 3426/93; 281/96
Sulphur	Annex II	Regs 895/93; 544/2003
Suxibuzone	No recommendation	
Symphyti radix	Annex II	Reg. 1931/99

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Substance	Status	Regulation amending Annex of Regulation 2377/90
Syzygium cumini	Annex II	Reg. 2728/99
Tanninum	Annex II	Reg. 1568/98
Tartaric acid [L-tartaric acid] and mono- and di-basic salt of sodium, potassium and calcium	Annex II	Reg. 1442/95
Tau-fluvalinate	Annex II	Reg. 2034/96
Teflubenzuron	Annex I	Regs 426/98; 1931/99
Terebinthinae aetheroleum rectificatum	Annex II	Reg. 1916/98
Terebinthinae laricina	Annex II	Reg. 1916/98
Terpin hydrate	Annex II	Reg. 1916/98
Tetracaine	Annex II	Reg. 1569/98
Tetracycline	Annex I	Regs . 3426/93; 281/96
Theobromine	Annex II	Reg. 282/96
Theophylline	Annex II	Reg. 282/96
Thiabendazole	Annex I	Regs 3093/92; 1311/96; 1000/98; 1646/2004
Thiamphenicol (bovine, chicken)	Annex I	Regs 895/93; 1798/96; 1000/98; 804/99
Thiamphenicol (pigs)	Annex III proposal	
Thiamylal	Annex II	Reg. 749/2001
Thiomersal	Annex II	Reg. 749/97
Thiopental sodium	Annex II	Reg. 749/2001
Thiotic acid	Annex II	Reg. 1931/99
Threonine	Annex II	Reg. 1931/99
Thuja occidentalis	Annex II	Reg. 1942/99
Thymi aetheroleum	Annex II	Reg. 2560/98
Thymidine	Annex II	Reg. 1931/99
Thymol	Annex II	Reg. 1742/96
Tiamulin	Annex I	Regs 2728/99; 2338/2000; 807/2001
Tiaprost	Annex II	Reg. 998/99
Tiliae flos	Annex II	Reg. 1958/98
Tiludronic acid, disodium salt	Annex II	Reg. 1478/2001
Tilmicosin	Annex I	Regs 955/94; 1102/95; 1917/98; 2338/2000; 2391/2000; 1274/2001; 1181/2002
Timerfonate	Annex II	Reg. 749/97
Toldimphos	Annex II	Reg. 1295/2000
Tolfenamic acid	Annex I	Reg. 1838/97
Toltrazuril (porcine; chicken, turkey)	Annex I	Regs 1916/98; 2593/99; 2908/2000
Toltrazuril (bovine)	Annex III (01.07.2006)	Reg 2232/2004
Tosylchloramide sodium	Annex II	Regs 2393/99; 1680/2001
Tragacanth	Annex II	Reg. 2796/95
Tricaine methane sulphonate	Annex II	Reg. 1942/99
Trichlormethiazide	Annex II	Regs 1942/99; 61/2003
Triclabendazole	Annex I	Regs 895/93; 1441/95; 426/98
Trimethoprim	Annex I	Regs 675/92; 281/96; 121/98; 1181/2002
Trimethylphloroglucinol	Annex II	Reg. 1311/96
Trypsin	Annex II	Reg. 1931/99
Tryptophan	Annex II	Reg. 1931/99
Tulathromycin	Annex I	Regs 1937/2002; 1101/2004

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Substance	Status	Regulation amending Annex of Regulation 2377/90
Turnera diffusa	Annex II	Reg. 2728/99
Tylosin	Annex I	Regs 3093/92; 1442/95; 1838/97; 1960/2000; 1181/2002
Tyrosin	Annex II	Reg. 1931/99
Urea	Annex II	Reg. 2796/95
Urginea maritima	Annex II	Reg. 2757/99
Uridine	Annex II	Reg. 1931/99
Urticae herba	Annex II	Reg. 1958/98
Valine	Annex II	Reg. 1931/99
Valnemulin	Annex I	Reg. 2560/98
Vedaprofen	Annex I	Regs 1147/96; 749/97
Vegetable carbon	Annex II (E-number 153)	Reg. 2034/96
Vetrabutine hydrochloride	Annex II	Reg. 1931/99
Viburnum opulus	No recommendation	
Viburnum prunifolium	No recommendation	
Vincamine	Annex II	Reg. 1942/99
Virola sebifera (1:100)	Annex II	Reg. 1942/99
Viscum album	Annex II	Reg. 2728/99
Vitamin A	Annex II	Reg. 1879/2001
Vitamin B1	Annex II	Reg. 997/99
Vitamin B12	Annex II	Reg. 997/99
Vitamin B2	Annex II	Reg. 997/99
Vitamin B3	Annex II	Reg. 997/99
Vitamin B5	Annex II	Reg. 997/99
Vitamin B6	Annex II	Reg. 997/99
Vitamin D	Annex II	Reg. 1917/98
Vitamin E	Annex II	Reg. 997/99
Wool alcohols	Annex II	Reg. 2686/98
Xylazine hydrochloride	Annex II	Regs 2593/99; 1752/2002
Zinc acetate	Annex II	Reg. 17/97
Zinc aspartate	Annex II	Reg. 1286/2000
Zinc chloride	Annex II	Reg. 17/97
Zinc gluconate	Annex II	Reg. 17/97
Zinc oleate	Annex II	Reg. 17/97
Zinc oxide	Annex II	Reg. 2796/95
Zinc stearate	Annex II	Reg. 17/97
Zinc sulphate	Annex II	Reg. 2796/95

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7 豪州における登録有効成分リスト

RECORD OF APPROVED ACTIVE CONSTITUENTS FOR CHEMICAL PRODUCTS

as at 6 April 2005

A-K

This List is also accessible via:
http://www.apvma.gov.au/actives/subpage_actives.shtml

The current Standards for Active Constituents is accessible via
http://www.apvma.gov.au/actives/standards_actives.shtml

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
1,2-ethanediamine polymer with (chloromethyl) oxirane and n-methylmethanamine Manufacturing Concentrate	BUCKMAN LABORATORIES PTY LTD	BUCKMAN LABORATORIES INC BUCKMAN MANUFACTURING PLANT EAST BOMEN ROAD WAGGA WAGGA NSW AUSTRALIA	56821
1,3-dichloropropene	Dow AgroSciences Australia Limited	The Dow Chemical Company Building A-915 Freeport Texas 77541 USA	52481
1,3-dichloropropene	Dow AgroSciences Australia Limited	Dow Chemical G.m.b.H. Werk Stade D-2160 Stade GERMANY	52747
1-Methylcyclopropene	ROHM AND HAAS AUSTRALIA LIMITED	ROHM AND HAAS COMPANY USA ROUTE 413 AND OLD ROUTE 13 BRISTOL, PA, 19007 USA	56491
2-(Thiocyanomethylthio)benzothiazole (TCMTB)	Buckman Laboratories Ltd	Buckman Laboratories Inc 1256 North McLean Boulevard Memphis Tennessee 38108-0305 USA	44403
2,4-D	A H Marks Australia Limited	A H Marks & Company Limited Wyke Lane Wyke Bradford West Yorkshire BD12 9EJ United Kingdom	51006
2,4-D	NUFARM AUSTRALIA LIMITED	Dalian Songliao Chemical Industrial Company Ltd 22 Gongxing Road Ganjingzi Dalian Liaoning 116031 CHINA	44245

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
2,4-D	Ancom Australia Pty Ltd	Ancom Crop Care SDN BHD Persiaran Selangor 40000 Shah Alam Selangor D.E. MALAYSIA	47430
2,4-D	Dow AgroSciences Australia Limited	Sanachem (Pty) Ltd Hytor Road Chloorkop Kempton Park 1620 SOUTH AFRICA	47158
2,4-D	Dow AgroSciences Australia Limited	Dow Agro Sciences LLC The Dow Chemical Company Plant 1 Midland Michigan 48640 USA	47550
2,4-D	Farmoz Pty Ltd	Choseright Limited Jin Jiang Agricultural Chemical Factory No 14 Hong Qiao North Road Jingjiang City Jiangsu Province CHINA	48691
2,4-D	Farmoz Pty Ltd	Atanor S.A. C. Correo No. 12 (5850) Rio Tercero Pcia. De Cordoba ARGENTINA	51416
2,4-D	Nufarm Australia Limited	Nufarm Australia Limited 103 - 105 Pipe Road Laverton Victoria 3028 AUSTRALIA	44393
2,4-D	Nufarm Australia Limited	Nufarm Pflanzenschutz GmbH & Co KG St Peter Strasse A4021 Linz AUSTRIA	48602

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
2,4-D	Nufarm Australia Limited	Rhone Poulenc Agrochimie Usine de Pont de Claix F - 38800 Le Pont de Claix FRANCE	44089
2,4-D	Rotam Australasia Pty Ltd	Atul Limited Atul Pardi Valsad Gujarat 396020 INDIA	44074
2,4-D	Sanonda (Australia) Pty Ltd	Hubei Sanonda Co Ltd No 1 East Beijing Road Shasi City Hubei 434011 CHINA	47160
2,4-D	HALLEY INTERNATIONAL ENTERPRISE (AUSTRALIA) PTY LTD	Jiamusi Heilong Agricultural and Industrial Chemical Group Co Import and Export Corp 14 Changan Road Jiamusi City Heilongjiand Province CHINA	52405
2,4-D	REDOX CHEMICALS PTY LTD	ROKITA-AGRO SA UL SIENKIEWICZA 4 56-120 BRZEG DOLNY POLAND	58050
2,4-D 2-butoxyethyl ester	Dow AgroSciences Australia Limited	Dow Agro Sciences LLC The Dow Chemical Company Plant 1 Midland Michigan 48640 USA	47551
2,4-D-2-ethylhexyl ester	Nufarm Australia Limited	Rhone-Poulenc Agrochimie Nufarm UK Limited Belvedere Plant Crabtree Manor Way North Belvedere Kent DA17 6BQ UNITED KINGDOM	44088

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
2,4-D-2-ethylhexyl ester	Dow AgroSciences Australia Limited	Dow Agro Sciences LLC The Dow Chemical Company Plant 1 Midland Michigan 48640 USA	47552
2,4-D-2-ethylhexyl ester	Nufarm Australia Limited	Nufarm Australia Limited 103 - 105 Pipe Road Laverton Victoria 3028 AUSTRALIA	47190
2,4-D-2-ethylhexyl ester	Nufarm Australia Limited	Nufarm UK Limited Belvedere Plant Crabtree Manor Way North Belvedere Kent DA17 6BQ UNITED KINGDOM	46746
2,4-D-2-ethylhexyl ester	Binary Chemicals Pty Ltd	Binary Chemicals Pty Ltd 42 Magnesium Street Narangba QLD AUSTRALIA	52797
2,4-D-2-ethylhexyl ester	A H Marks Australia Pty Limited	A H Marks and Company Limited Wyke Lane Wyke Bradford West Yorkshire BD12 9EJ UNITED KINGDOM	54018
2,4-D-butyl ester	Dow AgroSciences Australia Limited	Dow Agro Sciences LLC The Dow Chemical Company Plant 1 Midland Michigan 48640 USA	47549
2,4-D dimethylamine salt	Nufarm Australia Limited	Nufarm Gmbh & Co Kg St Peter Strasse 25 A-4201 LINZ AUSTRIA	52708

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
2,4-D-ethyl ester	Nufarm Australia Limited	Nufarm Australia Limited 103 - 105 Pipe Road Laverton Victoria 3028 AUSTRALIA	47189
2,4-D-ethyl ester	NUFARM AUSTRALIA LIMITED	Atul Limited Atul 396 020 Valsad Gujarat INDIA	51903
2,4-D-ethyl ester	Rotam Australasia Pty Ltd	Atul Limited Atul 396 020 Valsad Gujarat INDIA	51653
2,4-D-isobutyl ester	A H Marks Australia Pty Ltd	A H Marks & Company Ltd. England Wyke Lane Wyke Bradford WEST YORKSHIRE BD12 9EJ ENGLAND	51007
2,4-D-isobutyl ester	Ancom Australia Pty Ltd	Ancom Crop Care SDN BHD Persiaran Selangor 40000 Shah Alam Selangor D.E. MALAYSIA	47486
2,4-D-isobutyl ester	Nufarm Australia Limited	Nufarm Australia Limited 103 - 105 Pipe Road Laverton Victoria 3028 AUSTRALIA	47187
2,4-D-isobutyl ester	Rotam Australasia Pty Ltd	Atul Limited ATUL 396 020 Valsad Gujarat INDIA	52286

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
2,4-D-isobutyl ester	Binary Chemicals Pty Ltd	Binary Chemicals Pty Ltd 42 Magnesium Street Narangba QLD AUSTRALIA	52798
2,4-D isopropylamine salt	Nufarm Australia Limited	Nufarm Gmbh & Co Kg St Peter Strasse 25 A-4201 LINZ AUSTRIA	52707
2,4-D-n-butyl ester	Nufarm Australia Limited	Nufarm Australia Limited 103 - 105 Pipe Road Laverton Victoria 3028 AUSTRALIA	47188
2,4-DB	A H Marks Australia Pty Ltd	A H Marks and Company Limited Wyke Lane Wyke Bradford West Yorkshire BD12 9EJ UNITED KINGDOM	47083
2,4-DB	Nufarm Australia Limited	Nufarm bv Akzo Nobel Haven Harbour 4150 Welplaatweg 12 3197 KS Botlek Roterdam THE NETHERLANDS	54533
2,4-DB-dimethylammonium	A H Marks Australia Pty Ltd	A H Marks and Company Limited Wyke Lane Wyke Bradford West Yorkshire BD12 9EJ UNITED KINGDOM	47084
2,4-D-sodium	Nufarm Australia Limited	Nufarm Australia Limited 103 - 105 Pipe Road Laverton Victoria 3028 AUSTRALIA	44483

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
3-iodo-2-propynyl-N-butyl carbamate	NUFARM AUSTRALIA LIMITED	TROY CHEMICAL CORPORATION ONE AVENUE L NEWARK NEW JERSEY 07105 USA	44149
3-Iodo-2-propynyl-N-butyl carbamate	Arch Chemicals Inc	Arch Chemicals Inc. 100 McKee Road Rochester New York 14601 USA	51225
4,5-dichloro-2-n-octyl-3(2H)-isothiazolone	Rohm & Haas Australia Pty Ltd	Rohm & Haas (UK) Limited Tyneside Works, Jarrow Tyne & Wear NE32-3DJ County Durham UNITED KINGDOM	46260
6-Benzyladenine	Valent BioSciences (A division of Sumitomo Chemical Australia Pty Ltd)	Abbott Laboratories Chemical & Agricultural Products Division 1401 Sheridan Road North Chicago Illinois 60064-4000 USA	44449
6-Benzyladenine	Bloomfresh Pty Ltd	Krishi Rasayan (Bihar) Shed 2A, Large Industrial Estate RK Ashram, Muzaffarpur Bihar INDIA	44598
6-Benzyladenine	Valent BioSciences (A division of Sumitomo Chemical Australia Pty Ltd)	Zhejiang Shenghua Biok Biology Co. Ltd Zhongguan Industrial Park Dequing County Zhejiang Province 313216 PEOPLES REPUBLIC OF CHINA	51841
6-Benzyladenine	Valent BioSciences (A division of Sumitomo Chemical Australia Pty Ltd)	Borregaard Synthesis Inc. 9 Opportunity Way Newburyport Massachusets 10950 USA	51842

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
6-Benzyladenine	Farmoz Pty Limited	Shanghai No. 18 Pharmaceutical Factory No. 804 Bao San Road Shanghai 200081 PEOPLE'S REPUBLIC OF CHINA	53351
6-Benzyladenine	Fine Agrochemicals Limited C/o Kerwin Chambers Associates Pty Ltd	Cherole Limited Jagelllo 3792 Sajobabony HUNGARY	53551
Abalone powder	INTERPATH PTY LTD	NUTRIZEAL 10 ROTHERHAM ST NELSON NEW ZEALAND	56342
Abamectin	NUFARM AUSTRALIA LIMITED	Zhejiang Hisun Pharmaceutical Co., Ltd Zhejiang Haimen Pharmaceutical Company 43 Gongren Road, Jiao Jiang District Taizhou City, Zhejiang 318000 CHINA	44497
Abamectin	Chemvet Australia Pty Ltd	Zhejiang Hisun Pharmaceutical Co., Ltd Zhejiang Haimen Pharmaceutical Company 43 Gongren Road, Jiao Jiang District Taizhou City, Zhejiang 318000 CHINA	48586
Abamectin	Jurox Pty Ltd	Haimen Pharmaceutical Company 43 Gongren Road, Jiao Jiang District Taizhou City, Zhejiang 318000 CHINA	48801
Abamectin	Mectt Australia Pty Ltd	Beijing Agricultural University Newtech Development Corporation 2 Yuanmingyuan West Road Beijing 100094 CHINA	49393

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Abamectin	Newtech International Pty Ltd	Beijing Agricultural University Newtech Development Corporation 2 Yuanmingyuan West Road Beijing 100094 CHINA	44327
Abamectin	TIGER INVESTMENTS PTY LTD T/A TIGER CHEMICAL COMPANY	Zhejiang Hisun Pharmaceutical Co., Ltd Zhejiang Haimen Pharmaceutical Company 43 Gongren Road, Jiao Jiang District Taizhou City, Zhejiang 318000 CHINA	50879
Abamectin	Virbac (Australia) Pty Limited	Haimen Pharmaceutical Company 43 Gongren Road, Jiao Jiang District Taizhou City, Zhejiang 317700 CHINA	47725
Abamectin	Rotam Australasia Pty Ltd	Zhejiang Shenghua Biok Biology Co. Ltd Zhongguan Industrial Park Deqing Zhejiang Province PEOPLE'S REPUBLIC OF CHINA	52801
Abamectin	Imtrade AgroSciences Pty Ltd	Zhejiang Hisun Chemical Co., Ltd 43 Gongren Road Jiaojiang Taizhou Zhejiang PEOPLE'S REPUBLIC OF CHINA	53333
Abamectin Manufacturing Concentrate	Merck Sharp & Dohme (Australia) Pty Ltd	Merck & Co., Inc 100 Avenue C Riverside Pennsylvania 17868 USA	46205
Abamectin Manufacturing Concentrate	Syngenta Crop Protection Pty Limited	Merck & Co., Inc 100 Avenue C Riverside Pennsylvania 17868 USA	50878

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Acephate	ARVESTA CORPORATION	Chevron Chemical Company 940 Hensley Street Richmond California 94804 USA	44285
Acephate	United Phosphorus Limited	United Phosphorus Limited 3405 G.I.D.C. Anklweshwar Gujarat 393010 INDIA	49038
Acephate	ARVESTA CORPORATION	Sumitomo Chemical Company Oita Works 2200 Tsuraski Oita 870-01 JAPAN	51807
Acephate	Sabero Australia Pty Ltd	Sabero Organics Gujarat Limited Plot No. 2102 GIDC Sarigram – 396155 Dist: Bulsar Gujarat INDIA	52055
Acephate	A & C Chemicals Pty Ltd	Meghmani Organics Ltd Block 412, 403, 452 Chharodi Sanand Ahmedabad INDIA	52058
Acephate	ARVESTA CORPORATION	Tekchem S. A. de C.V. KM. 314.5 Carretera Panamericana Salamanca, GTO. C.P. 36770 MEXICO	53263

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Acephate	SINON AUSTRALIA PTY LIMITED	SINON CORPORATION NO 111, CHUNG SHAN RD TA-TU HSIANG TAICHUNG HSIEN 432 TAIWAN	58227
Acetamiprid	CERTIS AUSTRALIA PTY LIMITED	NIPPON SODA CO LIMITED NIHONGI PLANT 95O FUJISAWA NAKAGOH NAKA-KUBIKI-GUN NIIGATA 949-23 JAPAN	54234
Acibenzolar-S-methyl	Syngenta Crop Protection Pty Limited	Syngenta Grimsby Limited Pyewipe Grimsby North East Lincolnshire DN31 2SR England UNITED KINGDOM	54187
Acifluorfen-sodium Manufacturing Concentrate	UNITED PHOSPHORUS LTD	Rohm & Haas Company Bayport Inc 13300 Bay Area Boulevard Laporte Texas 77571 USA	44581
Acrolein	BAKER PETROLITE CORPORATION (USA)	Magna International Ltd Weissfrauenstrasse 9 D-6000 Frankfurt AM Main 11 GERMANY	44508

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Acrolein	BAKER PETROLITE CORPORATION (USA)	JSC VOLZHSHKY ORGSYNTHTHESE 404117 VOLZHSHKY VOLVOGRAD REGION RUSSIA Or TAFT MANUFACTURING COMPANY 19815S LAKE RD TAFT CALIFORNIA 93268 USA	44490
Agrobacterium Radiobacter var radiobacter strain K1026	Bio-Care Technology Pty Ltd	Bio-care Technology Pty Ltd RMB 1084 Pacific Highway Somersby NSW 2250 AUSTRALIA	44345
Aldicarb Manufacturing Concentrate	Bayer CropScience Pty Ltd	BAYER CROPSCIENCE COMPANY INSTITUTE PLANT ROUTE 25 CHARLESTON WEST VIRGINIA 25112 USA	44025
Aldicarb Manufacturing Concentrate	Bayer CropScience Pty Ltd	BAYER CROPSCIENCE COMPANY 5954 HARRIETTS BLUFF ROAD EAST WOODBINE GEORGIA 31569 USA	44450
Aldoxycarb	Bayer CropScience Pty Ltd	BAYER CROPSCIENCE COMPANY INSTITUTE PLANT ROUTE 25 CHARLESTON WEST VIRGINIA 25112 USA	44023
Alpha-cypermethrin	BASF Australia Ltd	Shell Nederland Chemie BV Vondelingenweg 601 3190 GB Hoogvliet-Rotterdam THE NETHERLANDS	44186

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Alpha-cypermethrin	BASF Australia Ltd	BASF S.A. Rodovia Presidente Dutra KM 300.5 27500 Resende RJ BRAZIL Or GUJARAT AGROCHEM LTD PANOLI ANKLESHWAR GUJARAT INDIA	44525
Alpha-cypermethrin	Gharda Australia Pty Ltd	Gharda Chemicals Ltd C\o Gharda Research & Development Centre B27-29 MIDC Dombivili (E) 421203 District Thane INDIA	45759
Alpha-cypermethrin	FMC (Chemicals) Pty Limited	BASF India Ltd Plot No: 12 Trans-Thane Creek Area Turvbhe Thane Belapur Road, Thane 400613 INDIA	48943
Alpha-cypermethrin	Jurox Pty Ltd	L. G. Chemical Ltd Osman Plant 580 Hwasan-Ri Onsan-Myon Ulsan-Kun Kyongnam KOREA	47246
Alpha-cypermethrin	Lief Petroleum Pty Ltd	Mitsu Industries Limited Plot No: 304/2 GIDC Vapi – 396 195 Gujarat INDIA	44118

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Alpha-cypermethrin	Colin Campbell (Chemicals) Pty Ltd	Bharat Rasayan Limited Madina Mokhra Road Village Mokhra The. Meham Dist. Rohtak (Haryana) 124 022 INDIA	51478
Alpha-cypermethrin	Imtrade AgroSciences Pty Ltd	Tagros Chemicals India Limited A 4/1 Sipcot Industrial Complex Cuddalore 607-005 INDIA	52437
Alpha-cypermethrin	HALLEY INTERNATIONAL ENTERPRISE (AUSTRALIA) PTY LTD	Mitsu Industries Limited Plot No. 304/2 GIDC Vapi – 396 195 Gujarat INDIA	52956
Alpha-cypermethrin	SIPCAM PACIFIC AUSTRALIA PTY LTD	Bilag Industries Limited Plot # 306/3 II Phase GIDC Vapi 396 195 Gujarat INDIA	54042

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Alpha-cypermethrin	AGROGILL CHEMICALS PTY LTD	MEGHMANI ORGANICS LIMITED BLOCK NO 403, 404, 452 POST CHHARODI TA. SANAND, DIST. AHMEDABAD 382 170 INDIA	55459
Alpha-cypermethrin	TIGER INVESTMENTS PTY LTD T/A TIGER CHEMICAL COMPANY	ISAGRO (ASIA) AGROCHEMICALS PVT LTD 640 G.I.D.C. INDUSTRIAL ESTATE PANOLI, DISTRICT BHARUCH 394 116 GUJARAT STATE INDIA	57924
Aluminium Phosphide	Imtrade AgroSciences Pty Ltd	Agrosynth Chemicals Limited Byrapyra Village Devanahalli Taluk Hardhalli Post Bangalore 562 110 INDIA	44527
Aluminium Phosphide	Craig Mostyn & Co Pty Ltd	Shenyang Pesticide Factory No 101 Haitang Street Sujiatun District Shenyang Liaoning Province CHINA	46873
Aluminium Phosphide	Farmoz Pty Ltd	Shenyang Pesticide Factory No 101 Haitang Street Sujiatun District Shenyang Liaoning Province CHINA	46896
Aluminium Phosphide	JedCourt Pty Ltd	Sandhya Organic Chemicals Pty Ltd Plot No:808/A/2, III Phase GIDC, Vapi 396195 Valsad District, Gujrath INDIA	44491
Aluminium Phosphide	Nufarm Australia Limited	Detia Degesch GmbH Dr Werner-Freyberg Strasse D-6947 Laudenbach GERMANY	44299

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Aluminium Phosphide	Nufarm Australia Limited	Sinochem International Chemicals Company Ltd A2 Fuxing Menwei Street Beijing 100046 P.R. CHINA	44021
Aluminium Phosphide	Excel Industries (Australia) PtyLtd	Excel Industries Ltd Amboli Hill, Veera Dessai Road Adheri (West) Bombay 400058 INDIA	44298
Aluminium Phosphide	Rentokil Initial Pty Ltd	Casa Bernado Limited Rodovia Padre Manoel da Nobrega Km. 65 Samarita 11346-300 Sao Vicente/sp BRAZIL Or CASA BERNARDO LTDA LONGKOU CITY CHEMICAL PLANT SIPING LANGAO TOWN LONGKU CITY SHANDONG PROVINCE 265709 PR CHINA	44102
Aluminium Phosphide	SMART CHEMICALS	Jining Rencheng Qu Baofeng Chemical Plant Yong Cheng Chemical Plant Jining High Technology Development Zone 75 Jian She North Road Jining Shandong CHINA	51042
Aluminium Phosphide	United Phosphorus Limited	United Phosphorus Limited 11 GIDC Vapi Gujarat 396 195 INDIA	44101
Ametryn	C R & J H Chadwick	Oxon Italia SpA Via Sempione 195 20016 Pero Milan ITALY	47650

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Ametryn	Makhteshim-Agan (Australia) Pty Ltd	Agan Chemical Manufacturers Ltd Northern Industrial Zone Ashdod 77102 ISRAEL	44139
Ametryn	Syngenta Crop Protection Pty Limited	Syngenta Corporation McIntosh Plant Geigy Road McIntosh Alabama 36553 USA	44141
Ametryn	Sipcam Pacific Australia Pty Limited	Oxon Italia SpA. Strada Provinciale Km 2.6 27030 Mezzana Bigli (PV) ITALY	48800
Ametryn	Agrogill Chemicals Pty Ltd	Meghmani Industries Limited Block No. 401 Village Chharodi Taluka Sanand District Ahmedabad State Gujarat INDIA	55298
Ametryn	BECOT PTY LTD T/AS IMTRADE COMMODITIES	JINAN RAINBOW CHEMICAL CO., LTD DIAOSHANPO TOWN PINGYIN JINAN SHANDONG 250404 PR CHINA	55313
Aminoethoxyvinylglycine	VALENT BIOSCIENCES A DIV OF SUMITOMO CHEMICAL AUSTRALIA	Abbott Laboratories 1401 Sheridan Road North Chicago USA	51106
Amitraz	Bayer CropScience Pty Ltd	BAYER CROPSCIENCE LTD KNOLL PHARMACEUTICALS 1 THANE RD WEST NOTTINGHAM NG1 3AA UNITED KINGDOM	44048

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Amitraz	RUNGE AGRICHEMS PTY LTD	Jiangsu Bailing Pesticides Plant No. 4 Bridge Jiangguan Road Jiangyan City Jiangsu 225 529 PR CHINA	47657
Amitraz	Makhteshim-Agan (Australia) Pty Limited	Milenia Agro Ciencias SA Rua Padre Chagas 79-7 Andar° 90570-080 Porto Alegre – RS BRAZIL	51762
Amitraz	Bayer CropScience Pty Ltd	Atabay A.S. Acibadem Koftunku Sok. No. 1 Istanbul 81010 TURKEY	52076
Amitraz	NUFARM AUSTRALIA LIMITED	Jiangsu Bailing Pesticides Plant No. 4 Bridge Jiangguan Road Jiangyan City Jiangsu 225 529 PR CHINA	52403
Amitraz	CONQUEST AGROCHEMICALS PTY LTD	KASMAC CHEMICAL INDUSTRY CO DONGTAI CHEMICAL CO LTD 22 RUYT RD DONGTAI TOWN JIANGSU PR CHINA	55990
Amitraz	ECHEM (AUST) PTY LIMITED	ZHEJIANG CHEM-TECH GROUP CO. LTD 926 XI XI ROAD HANGZHOU ZHEJIANG 310023 PR CHINA	56876
Amitrole	Nufarm Australia Limited	ATO FINA 65300 LANNEMEZAN FRANCE	47849

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Amitrole	Woolston Polymers & Chemicals Pty Ltd	Nippon Carbide Industries Co., Inc. 751 Motoshin Uozo-shi Toyama-Ken JAPAN	44057
Ammonium salts of phosphoric acid Manufacturing Concentrate	Interface Australia Pty Limited	Source Technologies Inc. 327 Industrial Drive Rockmart GA 30153 USA	45523
Asulam-sodium	Bayer CropScience Pty Ltd	BAYER CROPSCIENCE LTD SWEETBRIAR RD NORWICH NORFOLK NR6 5AP UNITED KINGDOM	44018
Asulam-sodium	FARMOZ PTY LIMITED	SHANGHAI ALL BRIGHT CO LTD NO 255 ANYU RD AN DONG TOWN CIXI ZHEJIANG 315327 PR CHINA	57866
Asulam-sodium Manufacturing Concentrate	Dow AgroSciences Australia Limited	Syntheta c/- Old Pretoria & George Road Halfway House REPUBLIC OF SOUTH AFRICA 1685	44524
Atrazine	Dow AgroSciences Australia Limited	Sanachem (Pty) Ltd Old Mill Site Canelands 4341 SOUTH AFRICA	45076
Atrazine	Makhteshim-Agan (Australia) Pty Ltd	Agan Chemical Manufacturers Ltd Northern Industrial Zone Ashdod 77102 ISRAEL	44047

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Atrazine	Syngenta Crop Protection Pty Limited	Syngenta Crop Corporation, Inc. St Gabriel Plant River Road St Gabriel Louisiana 70776-0011 USA	44367
Atrazine	Sipcam Pacific Australia Pty Limited	Oxon Italia SpA. Strada Provinciale Km 2.6 27030 Mezzana Bigli (PV) ITALY	48797
Atrazine	KENSO CORPORATION (M) SDN BHD	ZHEJIANG CHANGXING ZHONG SHAN CHEMICAL INDUSTRY CO LTD NO 4 BRIDGE CHENGBEI CHANGXING ZHEJIANG 313116 PR CHINA	57454
Atrazine	AGROGILL CHEMICALS PTY LTD	MEGHMANI INDUSTRIES LIMITED BLOCK NO 401 VILLAGE CHHARODI TALUKA SANAND, DISTRICT AHMEDABAD STATE GUJARAT 382 170 INDIA	57911
Azaconazole	Janssen-Cilag Pty Ltd	Janssen Pharmaceutica N.V. Janssen Pharmaceuticalaan 3 B-2440 Geel BELGIUM	44050

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Azadirachtin	E.I.D. PAmRRY (INDIA) LIMITED	E.I.D. PARRY (INDIA) LIMITED NEEM AZAL PLANT, THYAGAVALLI VILLAGE CUDDALORE - 608 803, SOUTH INDIA INDIA	53250
Azafenidin	Du Pont (Australia) Limited	Conoco Inc. Mid-Continent Division 1000 South Pine Street Ponca City, OK 74602 USA	52133
Azamethiphos	Novartis Animal Health Australasia Pty Ltd	Syngenta Crop Protection Schweizerhalle AG Industriestrasse CH-4133 Schweizerhalle SWITZERLAND	44073
Azamethiphos	Novartis Animal Health Australasia Pty Ltd	Shanghai Novartis Animal Health Ltd Wusi Farm Factory Feng Xina County CHI-Wuzi Farm Shanghai 201423 CHINA	52855
Azinphos-methyl	Bayer CropScience Pty Ltd	BAYER CROPSCIENCE AG BCS IOP A.I. MANUFACTURING ALTE HEERSTRASSE BUILDING A603 D-41538 DORMAGEN GERMANY	44081
Azinphos-methyl	Makhteshim-Agan (Australia) Pty Ltd	Makhteshim Chemical Works Ltd New Industrial Estate Beer-Sheva 84100 ISRAEL	44188
Azoxystrobin	SYNGENTA CROP PROTECTION PTY LIMITED	SYNGENTA AGROCHEMICALS EARLS RD, GRANGEMOUTH STERLINGSHIRE FK3 8XG SCOTLAND UNITED KINGDOM	44444

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Bacillus sphaericus strain 2362	VALENT BIOSCIENCES A DIV OF SUMITOMO CHEMICAL AUSTRALIA	ABBOTT LABORATORIES 1401 SHERIDAN RD NORTH CHICAGO IL 60064 USA	55988
Bacillus thuringiensis strain MPPL 002	MICROBIAL TECHNOLOGIES LIMITED	MICROBIAL TECHNOLOGIES LIMITED 18 KING ST NORWOOD SA 5067 AUSTRALIA	55991
Bacillus thuringiensis subsp. aizawai	VALENT BIOSCIENCES A DIV OF SUMITOMO CHEMICAL AUSTRALIA	Abbott Laboratories Chemical & Agricultural Products Division 1401 Sheridan Road North Chicago Illinois 60064-4000 USA	48309
Bacillus thuringiensis subsp. aizawai	CERTIS AUSTRALIA PTY LIMITED	Ciba-Geigy Co Faires Parkway Biosys Decatur Illinois 62506 USA	46419
Bacillus thuringiensis subsp. berliner var. kurstaki serotype 3a, 3b strain variant SA-12	CERTIS AUSTRALIA PTY LIMITED	Certis USA LLC 5th & G Street Wasco California 93280 USA	48603
Bacillus thuringiensis subsp. israelensis	Valent BioSciences (A division of Sumitomo Chemical Australia Pty Ltd)	Novo Nordisk A\S Hillerodgade 31 Fuglebakken DK-2200 Copenhagen N DENMARK	44128
Bacillus thuringiensis subsp. israelensis	Valent BioSciences (A division of Sumitomo Chemical Australia Pty Ltd)	Abbott Laboratories Chemical & Agricultural Products Division 1401 Sheridan Road North Chicago Illinois 60064-4000 USA	46095

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Bacillus thuringiensis subsp. israelensis	ROTAM AUSTRALASIA PTY LTD	Becker Microbial Products Inc. Highway 52N Kingstree South Carolina 29556 USA	45456
Bacillus thuringiensis subsp. israelensis	VALENT BIOSCIENCES A DIV OF SUMITOMO CHEMICAL AUSTRALIA PTY LTD	Certis USA 5th & G Street Wasco California 93280 USA	44355
Bacillus thuringiensis subsp. kurstaki	Valent BioSciences (A division of Sumitomo Chemical Australia Pty Ltd)	Novo Nordisk A\S Hillerodgade 31 Fuglebakken DK-2200 Copenhagen N DENMARK	44126
Bacillus thuringiensis subsp. kurstaki	Valent BioSciences (A division of Sumitomo Chemical Australia Pty Ltd)	Abbott Laboratories Chemical & Agricultural Products Division 1401 Sheridan Road North Chicago Illinois 60064-4000 USA	46913
Bacillus thuringiensis subsp. kurstaki	ROTAM AUSTRALASIA PTY LTD	ADM Bioproducts II 4666 Fairies Parkway Decatur Illinois 62526 USA	46174
Bacillus thuringiensis subsp. kurstaki	Dow AgroSciences Australia Limited	Mycogen Corporation 4980 Carrol Canyon Rd San Diego, California 92121 USA	44407
Bacillus thuringiensis subsp. kurstaki	CERTIS AUSTRALIA PTY LIMITED	Certis U.S.A. LLC 5th & G Street Wasco California 932 80 USA	44137

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Bacillus thuringiensis subsp. kurstaki delta endotoxins as produced by the Cry1Ac and Cry2Ab genes and their controlling sequences	MONSANTO AUSTRALIA LTD	MONSANTO COMPANY 800 N LINDBERGH BOULEVARD ST LOUIS, MISSOURI USA	56492
Bacillus thuringiensis subsp. tenebrionis	Valent BioSciences (A division of Sumitomo Chemical Australia Pty Ltd)	Novo Nordisk A\S Hillerodgade 31 Fuglebakken DK-2200 Copenhagen N DENMARK	44544
Beauveria Bassiana	Lances Link Australia Pty Limited	Troy BioSciences Incorporated Berdsk Plant of Biological Preparations 633190 Berdsk Novosibirsk Region RUSSIA	44066
Benalaxyl	Isagro Australia Pty Ltd	Isagro SpA Oxon Italia SpA Strada Provinciale Km 2,6 27030 Mezzana Bigli (PV) ITALY	44071
Bendiocarb	Bayer CropScience Pty Ltd	BAYER CROPSCIENCE COMPANY 1740 WHITEHALL ROAD NORTH MUSKEGON MICHIGAN 79445 USA	44467
Bensulfuron-methyl	Du Pont (Australia) Ltd	E. I. du Pont de Nemours & Co., Inc Belle Plant 901 West du Pont Avenue Belle West Virginia 25015 USA	44052
Bensulfuron-methyl	Du Pont (Australia) Ltd	E. I. du Pont de Nemours & Co., Inc C\o Du Pont Agrichemicals Caribe Inc. Manati Plant Carr 686, Km 2.3 Manati 0070 PUERTO RICO	44378

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Bensulfuron-methyl	Du Pont (Australia) Ltd	E. I. du Pont de Nemours & Co., Inc. C\o Du Pont de Nemours (Flandre) S.A. route du pres fevrier 59229 Loon-Plage FRANCE	44472
Bensulfuron-methyl	Du Pont (Australia) Ltd	E I du Pont de Nemours & Co., Inc. DuPont Agricultural Chemicals Ltd 3055 Pu Dong Bei Lu Shanghai 200137 PEOPLE'S REPUBLIC OF CHINA	46504
Bensulfuron-methyl	Generex Australia Pty Ltd	Jiangsu Institute of Ecomones Researsh Experimental Plant 102 Xiemen Ave Jintan Jiangsu Province 213200 CHINA	47044
Bensulfuron-methyl	FARMOZ PTY LIMITED	NANTONG KUAIDA CHEMICAL INDUSTRY CO. LTD NO. 2 JIANSHE ROAD MATANG TOWN JIANGSU 226401 P.R. CHINA	54340
Bensulide	Crop Care Australasia Pty Ltd	Syngenta Agrochemicals Cold Creek Plant US Highway 43 Bucks Alabama 36512 USA	44282
Bentazone	BASF Australia Limited (AgrEvo Pty Ltd)	BASF Aktiengesellschaft Carl-Bosch Strasse 38 6700 Ludwigschafen am Rhein GERMANY	44333
Bentazone Manufacturing Concentrate	BASF Australia Limited (AgrEvo Pty Ltd)	BASF Aktiengesellschaft Carl-Bosch Strasse 38 D-6700 Ludwigschafen am Rhein GERMANY	49343

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Benzofenap	Bayer CropScience Pty Ltd	BAYER CROPSCIENCE JAPAN K.K JAPAN HYDRAZINE CO INC. NIIGATA DAINI FACTORY 8-25-1 MATSUHAMA, NIIGATA-SHI NIIGATA-KEN JAPAN	44560
Benzofenap	Bayer CropScience Pty Ltd	BAYER CROPSCIENCE JAPAN K.K. ITABASHI CHEMICAL INDUSTRIAL CO LIMITED URAWA FACTORY 1-25-8 SHIBIRAKI SAITAMA-SHI SAITAMA-KEN JAPAN	44565
Beta-cyfluthrin	Bayer CropScience Pty Ltd	Mitchell Cotts Chemicals Limited Steanard Lane Mirfield West Yorkshire WF14 8QB UNITED KINGDOM	44207
Beta-cypermethrin	Atofina (Australia) Pty Ltd	Chinoin Pharmaceutical and Chemical Works Co. Banyaleg u.2 1225 Budapest POB 49 HUNGARY	51578
Bifenazate	CROMPTON SPECIALTIES PTY LTD	ALIACHEM A.S. DIVISION SYNTHESIA 53217 PARDUBICE - SEMTIN CZECH REPUBLIC	55757
Bifenthrin	FMC (Chemicals) Pty Limited	FMC Corporation Agricultural Chemical Group 1701 East Patapasco Avenue Baltimore Maryland 21226 USA	44362

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Bifenthrin	Farmoz Pty Limited	Chemtech Company Limited Zhejiang Shenghua Biok Biology Co. Limited Zhongguan Industrial Park Deqing Zhejiang 313220 PEOPLE'S REPUBLIC OF CHINA	54391
Bifenthrin	UNITED PHOSPHORUS LTD	UNITED PHOSPHORUS LIMITED 3-11 GIDC VAPI - 396 195 GUJARAT INDIA	55237
Bifenthrin	GULMOHAR PTY LTD	SCIIC AGROCHEMICALS LIMITED HUANTAI TOWN ZIBO CITY SHANDONG PROVINCE P.R. CHINA	55301
Bifenthrin	NUFARM AUSTRALIA LIMITED	JIANGSU INSTITUTE OF ECOMONES RESEARCH 102 XIMEN STREET JINTAN JIANGSU PR CHINA 213200	55353
Bifenthrin	A & C CHEMICALS PTY LTD	PSYCHE CHEMICALS CO., LTD SHANDONG HUYANG TECHNOLOGY CO LTD CIYAO TOWN NINGYANG COUNTY SHANDONG PEOPLES REPUBLIC OF CHINA	55925
Bifenthrin	CONQUEST AGROCHEMICALS PTY LTD	KASMAC CHEMICAL INDUSTRY CO LTD 15 XIHUAN RD BINGJIANG CHEMICAL DEVELOPMENT ZONE CHANGZHOU JIANGSU PR CHINA	55993

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Bifenthrin	AGROGILL CHEMICALS PTY LTD	JIANGSU CHANGLONG CHEMICALS CO., LTD LONGHU TANG NEW DISTRICT OF CHANGZHOU JIANGSU 213031 P.R. CHINA	56018
Bifenthrin	IMTRADE AGROSCIENCES PTY LTD	HEBEI GOLHIL CHEMICAL CO LTD 457 HEPING W RD SHIJIAZHUANG 050071 PR CHINA	55763
Bioallethrin	Sumitomo Chemical Australia Pty Ltd	Roussel Uclaf 31, quai Aramand Barbes 69250 Neuville sur Saone FRANCE	44296
Bioallethrin	Sumitomo Chemical Australia Pty Ltd	Bilag Industries Ltd Plot 306/3 II Phase, GIDC Vapi 396 195 Gujarat INDIA	53468
Bioallethrin	TRI-DELTA CHEMICALS PTY LTD	CHANGZHOU KANGMEI CHEMICAL INDUSTRY CO. LTD RULIN TOWN JINTAN CITY 213225 P.R. CHINA	54215
Bioallethrin	TIGER INVESTMENTS PTY LTD T/A TIGER CHEMICAL COMPANY	CHANGZHOU KANGMEI CHEMICAL INDUSTRY CO. LTD RULIN TOWN JINTAN CITY 213225 P. R. CHINA	56859
Bioresmethrin	Sumitomo Chemical Australia Pty Ltd	Roussel Uclaf 31, quai Aramand Barbes 69250 Neuville sur Saone FRANCE	44203

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Bitertanol	Bayer CropScience Pty Ltd	BAYER CROPSCIENCE GMBH D 42096 WUPPERTAL FRIEDRICH EBERT STRASSE 217 GERMANY	44190
Bitertanol	Bayer CropScience Pty Ltd	Makhteshim Chemical Works Ltd 84100 Beer Sheva ISRAEL	51237
Bitter orange extract	Natural Agricultural Products Pty Ltd	Exquim, s.a. Joan Buscalla, 10 Aptdo, 70 08190 Sant Cugat del Valles Barcelona SPAIN	54697
Boscalid	BASF AUSTRALIA LTD	BASF AKTIENGESELLSCHAFT UNTERNEHMENSBEREICH ANORGANIKA D 67056 LUDWIGSHAFEN GERMANY	56449
Boscalid	BASF AUSTRALIA LTD	BASF SA AVENIDA BRASIL 791 BAIRRO ENGENHEIRO NEIVA GURARATINGUETA SP CEP 12521-140 BRAZIL	58163
Brodifacoum	Syngenta Crop Protection Pty Limited	Pentagon Fine Chemicals Limtied Lower Road Halebank Widnes Cheshire L24 1XX UNITED KINGDOM	44192
Brodifacoum	Bell Laboratories Inc	Bell Laboratories Inc 3699 Kinsman Boulevard Madison Wisconsin 53704 USA	44522

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Brodifacoum	STARWELL (AUST) ENTERPRISES PTY LTD	DALIAN CHEMICAL INDUSTRIAL EXPERIMENTAL FACTORY NO. 199 ZHENGXING RD GANJINGZI DISTRICT DALIAN P.R. CHINA	54774
Brodifacoum Manufacturing Concentrate	HELIDON TECH PTY LTD	ACT CHEM COMPANY 4-308 TAIPIN QIAO NAN NANJING 210018 PR CHINA	48319
Brodifacoum Manufacturing Concentrate	Syngenta Crop Protection Pty Limited	Sorex Limited St Michaels Industrial Estate Hale Road Widnes Cheshire WA8 8TJ UNITED KINGDOM	44191
Brodifacoum Manufacturing Concentrate	Farmoz Pty Ltd	Dr Tezza S.R.L. via Treponti 22-37059 Santa Maria di Zerio Verona ITALY	48386
Bromacil	Du Pont (Australia) Ltd	E. I. du Pont de Nemours & Co., Inc La Porte Plant 12501 Strang Road La Porte Texas 77571 USA	44068
Bromacil	Makhteshim-Agan (Australia) Pty Limited	Agan Chemical Manufacturers Ltd Northern Industrial Zone Ashdod 77102 ISRAEL	44452
Bromadiolone	Animal Control Technologies (Australia) Pty Ltd	Calliope S.A. Route d'artix B.P.80, 64150 Nogueres FRANCE	51576

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Bromadiolone	Bell Laboratories Inc	Bell Laboratories Inc 3699 Kinsman Boulevard Madison Wisconsin 53704 USA	49195
Bromadiolone	Rentokil Initial Pty Ltd	Lipha Lyonnaise Industrielle Pharmaceutique Centre de production 10 Ave de Lattre de Tassigny 69330 Meyzieu FRANCE	44475
Bromadiolone Manufacturing Concentrate	Rentokil Initial Pty Ltd	Lipha Lyonnaise Industrielle Pharmaceutique Centre de Production 10 Ave de Lattre de Tassigny 69330 Meyzieu FRANCE	47790
Bromadiolone Manufacturing Concentrate	Rentokil Initial Pty Ltd	Lipha Lyonnaise Industrielle Pharmaceutique Centre de Production 10 Ave de Lattre de Tassigny 69330 Meyzieu FRANCE	47789
Bromadiolone Manufacturing Concentrate	Animal Control Technologies (Aust) Pty Ltd	Calliope SA Route d'Artix 64150 Nogueres FRANCE	47758
Bromochlorodimethylhydantoin	Bio-Lab Australia Pty Ltd	Great Lakes Chemical Corporation USA 1406 East Michigan Street Adrian Michigan 49221 USA	46432
Bromochlorodimethylhydantoin	Semal Pty Ltd T/as Consolidated Chemical Company	Bromine Compounds Limited Ramat Hovav Beer Sheva 84101 ISRAEL	44471

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Bromochlorodimethylhydantoin	Bradco Trading Pty Ltd	Liyang No. 6 Chemical Factory Gu Du Town Liyang City Jiangsu 213322 PEOPLE'S REPUBLIC OF CHINA	55240
Bromochlorodimethylhydantoin	DELTREX CHEMICALS A DIVISION OF CAMPBELL BROTHERS LIMITED	WUXI MEIHUA CHEMICAL COMPANY LTD GANGXIA INDUSTRIAL ZONE XISHAN CITY JIANGSU PROVINCE P.R. CHINA	55227
Bromochlorodimethylhydantoin	COMMODITY RESOURCES PTY LTD	WUXI MEIHUA CHEMICALS CO LTD GANGXIA TOWN WUXI JIANGSU 214199 PR CHINA	56731
Bromochlorodimethylhydantoin Dichlorodimethylhydantoin Dichloroethylmethylhydantoin	International Chemicals Pty Ltd	Lonza Inc. USA Lonza – Williamsport 3500 Trenton Avenue, Williamsport PENNSYLVANNIA, USA 17701	50868
Bromopropylate	Syngenta Crop Protection Pty Limited	Syngenta Grimsby Pyewipe Grimsby NE Lincolnshire DN31 2SR UNITED KINGDOM	44092
Bromoxynil	IMTRADE AGROSCIENCES PTY LTD	ZHEJIANG HEBEN PESTICIDE & CHEMICALS CO LTD 3-1 JUJIANG EAST ROAD YANGFUSHAN WENZHOU ZHEJIANG 325003 PR CHINA	56313
Bromoxynil heptanoate	Bayer CropScience Pty Ltd	BAYER CROPSCIENCE LTD SWEETBRIAR ROAD NORWICH, NORFOLK NR6 5AP ENGLAND UNITED KINGDOM	44064

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Bromoxynil octanoate	Nufarm Australia Limited	Aventis Nufarm SA Zone Industrielle No. 1 Notre Dame de la Garenne 27600 Gaillon FRANCE	44017
Bromoxynil octanoate	Makhteshim-Agan (Australia) Pty Ltd	Agan Chemical Manufacturers Ltd Northern Industrial Zone Ashdod 77102 ISRAEL	44369
Bromoxynil octanoate	Bayer CropScience Pty Ltd	BAYER CROPSCIENCE LTD SWEETBRIAR ROAD NORWICH, NORFOLK NR6 5AP ENGLAND UNITED KINGDOM	44336
Bromoxynil octanoate	Farmoz Pty Limited	Chemtech Company Limited Yancheng Huifeng Pesticide Company Ltd Longdi South Street Dafeng Jiangsu Province 224173 PEOPLE'S REPUBLIC OF CHINA	53656
Bromoxynil octanoate	4Farmers Pty Ltd	Zhejiang Heben Pesticide and Chemicals Co. Ltd 3 - 1 Jujiang (E) Road Yangfushan Wenzhou Zhejiang 325003 PEOPLE'S REPUBLIC OF CHINA	54242

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Bromoxynil octanoate	FARMOZ PTY LIMITED	CHOSERIGHT LIMITED - FIVESTAR FINE CHEMICAL PLANT CHANGJIANG VILLAGE, LUHE TOWN TAICANG CITY, SUZHOU DISTRICT JIANGSU PROVINCE, PC 215428 P.R. CHINA	54557
Bromoxynil octanoate	AUSTRALIA WEI FOU INTERNATIONAL TRADING PTY LTD	KASMAC CHEMICAL INDUSTRY CO. LTD XIA SHA ECONOMIC & TECHNOLOGY DEV ZONE HANGZHOU ZHEJIANG P.R. CHINA	55300
Bromoxynil octanoate/heptanoate	Bayer CropScience Pty Ltd	BAYER CROPSCIENCE LTD SWEETBRIAR ROAD NORWICH, NORFOLK NR6 5AP ENGLAND UNITED KINGDOM	44519
Bromoxynil	Bayer CropScience Pty Ltd	BAYER CROPSCIENCE LTD SWEETBRIAR ROAD NORWICH, NORFOLK NR6 5AP ENGLAND UNITED KINGDOM	44335
Bromoxynil	Nufarm Australia Limited	Aventis Nufarm SA Zone Industrielle No.1 Notre Dame de la Garenne 27600 Gaillon FRANCE	44385
Bromuconazole	Bayer CropScience Pty Ltd	BAYER CROPSCIENCE LTD SWEETBRIAR RD NORWICH NORFOLK NR6 5AP UNITED KINGDOM	46518

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Bupirimate	Makhteshim-Agan (Australia) Pty Limited	Syngenta Agrochemicals Huddersfield Works Leeds Road Huddersfield HD 11FF UNITED KINGDOM	44263
Buprofezin	Dow AgroSciences Australia Limited	Nihon Nohyaku Co Ltd Kashima Plant 19 Sunayama Hasaki-machi Kashima-gun Ibaraki-ken 314-0255 JAPAN	51554
Buprofezin	GULMOHAR PTY LTD	JIANGSU ANPON GROUP CORPORATION 30 HUAGONG ROAD HUAIYIN JIANGSU PR CHINA	57785
Buprofezin	TRI-DELTA CHEMICALS PTY LTD	TRUSTCHEM CO LTD 89 HANZHONG RD NANJING 210029 PR CHINA	58385
Butafenacil	Syngenta Crop Protection Pty Limited	Syngenta Crop Protection Monthey AG Usine de Monthey Avenue de l'Industrie CH-1870 Monthey SWITZERLAND	52204
Butralin	Nufarm Australia Limited	Aventis Nufarm SA Zone Industrielle No 1 Notre Dame de la Garenne 27600 Gaillon FRANCE	44380

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Butroxydim	CROP CARE AUSTRALASIA PTY LTD	Zeneca Fine Chemicals Manufacturing Organisation Grangemouth Works Earls Road Grangemouth Stirlingshire FK3 8XG UNITED KINGDOM Or NUFARM SA NOTRE-DAME-DE-LA-GARENNE Z1 SECTEUR C27600, GAILLON FRANCE	45287
Cadusafos	FMC (Chemicals) Pty Limited	Pigmentos Y Oxidos SA AV Industrias 1200Pte Monterry N.L. 6400 MEXICO	46074
Captan	Makhteshim-Agan (Australia) Pty Ltd	Makhteshim Chemical Works Ltd New Industrial Estate Beer-Sheva 84100 ISRAEL	48196
Captan	RALLIS INDIA LIMITED	RALLIS INDIA LIMITED PLOT NO. 3301 GIDC INDUSTRIAL AREA ANKLESHWAR DISTRICT BHARUCH GUJARAT 393 002 INDIA	56732
Captan Manufacturing Concentrate	Crop-Care Australasia Pty Ltd	Tomen Agro Inc. Perry Plant 3647 Shepard Road Perry Ohio 44081 USA	48366
Captan Manufacturing Concentrate	ARVESTA CORPORATION	Arvesta Corporation Perry Plant 3647 Shepard Road Perry Ohio 44081 USA	51165

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Carbaryl	David Gray & Co. Pty Ltd	Haili Guixi Chemical & Agrochemical Company Limited Baili Industrial Area Guixi City Jiangxi Province 335400 CHINA	51004
Carbaryl	BAYER CROPSCIENCE PTY LTD	BAYER CROPSCIENCE COMPANY INSTITUTE PLANT ROUTE 25 CHARLESTON WEST VIRGINIA 25112 USA	44109
Carbaryl	Kendon Chemical & Manufacturing Co Pty Ltd	Haili Guixi Chemical and Agrochemical Ltd Co. Baili Industrial Area Guixi 335400 JiangXi Province PEOPLES REPUBLIC OF CHINA	52629
Carbendazim	4 Farmers Pty Ltd	Wuxian Agricultural Chemical Factory 2F No: 33 Zhonshan Road (West) Mudu Suzhou Jiangsu 215101 CHINA	44446
Carbendazim	BASF Australia Ltd	BASF Aktiengesellschaft Carl-Bosch Strasse 38 6700 Ludwigschafen am Rhein GERMANY	44469
Carbendazim	Du Pont (Australia) Ltd	E. I. du Pont de Nemours & Co., Inc Belle Plant 901 West du Pont Avenue Belle West Virginia 25015 USA	44099

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Carbendazim	Colin Campbell (Chemicals) Pty Ltd	Sinon Corporation 111 Chung Shan Road Ta-Tu Hsiang Taichung Hsien 432 TAIWAN	52717
Carbendazim	Farmoz Pty Ltd	Sinon Corporation 111 Chung Shan Road Ta-Tu Hsiang Taichung Hsien 432 TAIWAN	52720
Carbendazim	BASF Australia Ltd	BASF India Limited Plot No. 12 TTC area Thane Belapur Road Turbhe Navi Mumbai - 400 705 INDIA	53485
Carbendazim	Bayer CropScience Pty Ltd	BAYER CROPSCIENCE GMBH CHEMIE PARK KNAPSACK BUILDING 1440 D-50351 HURTH GERMANY	53851

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Carbendazim	IMTRADE AGROSCIENCES PTY LTD	ANHUI GUANGXIN AGROCHEMICAL CO., LTD DUSHAN TOWN GUANDE ANHUI P.R. CHINA	55520
Carbendazim	REDOX CHEMICALS PTY LTD	SUZHOU WORLDBEST AGRO-BIOCHEMICAL CO. LTD 2F No:33 Zhonshan Road (West) MUDU, SUZHOU JIANGSU Z215101 PR CHINA	58049
Carbendazim	SINON AUSTRALIA PTY LIMITED	SINON CORPORATION NO 111, CHUNG SHAN RD TA-TU HSIANG TAICHUNG HSIEN 432 TAIWAN TAIWAN	58228
Carbetamide	Bayer CropScience Pty Ltd	Rhone Poulenc Agrochimie Saint Aubin Les Elboeuf 76410 Cleon FRANCE	44302
Carbofuran	Dow AgroSciences Australia Limited	Sanachem (Pty) Ltd Old Mill Site Canelands 4341 SOUTH AFRICA	47452
Carbofuran	FMC (Chemicals) Pty Limited	FMC Corporation Agricultural Products Group Niagara Road Middleport New York USA	44594
Carbosulfan Manufacturing Concentrate	FMC (Chemicals) Pty Limited	FMC Corporation Agricultural Chemical Group Highway 25 Institute West Virginia 25112 USA	48828

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Carboxin	CROMPTON SPECIALTIES PTY LTD	CROMPTON CO/CIE ERB STREET ELMIRA ONTARIO N3B 3A3 CANADA	44036
Carfentrazone-ethyl	FMC (Chemicals) Pty Limited	FMC Corporation Quality Chemicals Inc Tyrone Industrial Park Tyrone Pennsylvania 16686-0216 USA	44431
Carfentrazone-ethyl	FMC (CHEMICALS) PTY LIMITED	FMC CORPORATION SHANGHAI BAODA VETERINARY PHARMACEUTICAL CO LTD NO 7738 HU TAI RD LUO DIAN TOWN SHANGHAI 201908 P.R. CHINA	55680
Chlorfenapyr	BASF Australia Ltd	Eastman Chemical Company Eastman Road Kingsport Tennessee 37660 USA	47986
Chlorfenvinphos	Fort Dodge Australia Pty Limited	Zaklady Chemiczne "Organika Azot" UL Szopena 94 32-510 Jaworzno POLAND	44031
Chlorfluazuron	Crop Care Australasia Pty Ltd	Ishihara Sangyo Kaisha Ltd Yokkaichi Works 1 Ishihara-cho Yokkaichi Mei-prefecture 510 JAPAN	44086
Chlorfluazuron	ENSYSTEX AUSTRALASIA PTY LTD	Ensystex Inc. 2911 Enterprise Avenue Fayetteville NC 28306 USA	54270

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Chlorfluazuron	TRI-DELTA CHEMICALS PTY LTD	TRUSTCHEM CO LTD 89 HANZHONG RD NANJING 210029 PR CHINA	58187
Chloridazon	BASF AUSTRALIA LTD	BASF Aktiengesellschaft Carl-Bosch Strasse 38 6700 Ludwigschafen am Rhein GERMANY	44495
Chlormequat chloride	BASF AUSTRALIA LTD	BASF Aktiengesellschaft 67 Ludwigschafen am Rhein GERMANY	44234
Chlormequat chloride Manufacturing Concentrate	CIBA SPECIALTY CHEMICALS PTY LIMITED	Allied Colloids Limited Cleckheaton Road LowMoor, Bradford West Yorkshire BD 120J2 UNITED KINGDOM	45489
Chlorothalonil	Gharda Australia Pty Ltd	Gharda Chemicals Limited, R & D Centres D-1/2 MIDC Lote Parshuram Pin 415722 Tal Khed District Ratnagiri Maharashtra INDIA	45758
Chlorothalonil	Farmoz Pty Ltd	Xin Yi Li Min Chemical Factory West Top, Bei Jiao Road Xin Yi City Jiangsu Province P. R. China	51040
Chlorothalonil	SDS Biotech KK	SDS Biotech KK 8 Ebisu-cho Kanagawa-ku Yokohama 221 JAPAN	44206

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Chlorothalonil	SYNGENTA CROP PROTECTION PTY LIMITED	ISK Biosciences Corporation Greens Bayou Plant 2239 Haden Road Houston Texas 77015 USA	44255
Chlorothalonil	Sipcam Pacific Australia Pty Limited	Industrie Chimiche Caffaro SpA via Francesco Nullo 8 25126 Brescia ITALY	48796
Chlorothalonil	NUFARM AUSTRALIA LIMITED	Limin Chemical Company Limited 31 Xintan Road Xinyi Jiangsu 221400 PEOPLE'S REPUBLIC OF CHINA	53373
Chlorothalonil	BECOT PTY LTD T/AS IMTRADE COMMODITIES	JIANGYIN LIGANG FINE CHEMICAL PLANT SOUTH LIGANG TOWN JIANGYIN CITY JIANGSU PROVINCE 214444 PR CHINA	55287
Chlorothalonil	LANCES LINK AUSTRALIA PTY LTD	SHANGHAI AGRICULTURAL CHEMICALS INDUSTRY CORPORATION NO 818 DONGFANG RD PUDONG NEW AREA SHANGHAI 200122 PR CHINA	55517
Chlorothalonil	ALLIANCE CHEMICALS PTY LTD	JIANGSU XINHE AGROCHEMICAL CO. LTD WEST XIN'AN RD XINYI CITY JIANGSU PROVINCE 221400 PR CHINA	55866

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Chlorothalonil	PACIFIC AGRISCIENCE PTY LTD	JIANGSU XINHE AGROCHEMICAL CO. LTD WEST XIN'AN RD XINYI CITY JIANGSU PROVINCE 221400 PR CHINA	57907
Chlorpropham	Crop Care Australasia Pty Ltd	MTM Agrochemicals Ltd Hall Lane Rookery Bridge Sandbach Cheshire CW11 9QQ England UNITED KINGDOM	44586
Chlorpropham	Gulmohar Pty Ltd	Hermania Dr. Schirm GmbH Geschwister Scholl Strasse 127 Schonebeck, D-39218 GERMANY	53014
Chlorpyrifos	Becot Pty Ltd t\as Imtrade Commodities	Bhagiradha Chemicals & Industriels Limited Cheruvukommupalem Village Ongole Mandal Prakasam District Andhra Pradesh INDIA	50886
Chlorpyrifos	Cheminova Australia Pty Limited	Cheminova Agro A/S Thyboronvej 76-78 DK-7673 Harboore DENMARK	48521
Chlorpyrifos	Dow AgroSciences Australia Limited	Dow Agro Sciences Ltd Estuary Road North Lynn, King's Lynn Norfolk UNITED KINGDOM	44111

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Chlorpyrifos	Excel Industries (Australia) Pty Ltd	Excel Industries Ltd 6/2, Ruvapari Road Bhavnagar - 364 001 Bombay 4000102 INDIA	47155
Chlorpyrifos	Gharda Australia Pty Ltd	Gharda Chemicals Ltd D-1/2 MIDC Lote Parshuram Pn - 415 722 Tal Khed District Ratnagiri Maharashtra INDIA	46888
Chlorpyrifos	Makhteshim-Agan (Australia) Pty Ltd	Makhteshim Chemical Works Ltd New Industrial Estate Beer-Sheva 84100 ISRAEL	44005
Chlorpyrifos	Dow AgroSciences Australia Limited	Dow Agro Sciences LLC The Dow Chemical Company Plant 1 Midland Michigan 48640 USA	44160
Chlorpyrifos	Dow AgroSciences Australia Limited	Dow Agro Sciences LLC The Dow Chemical Company Plant 1 Midland Michigan 48640 USA	44112
Chlorpyrifos	Dow AgroSciences Australia Limited	Dow Agro Sciences LLC The Dow Chemical Company Plant 1 Midland Michigan 48640 USA	44113

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Chlorpyrifos	AGROGILL CHEMICALS PTY LTD	BAGHIRADHA CHEMICALS & INDUSTRIES LIMITED YERAJARLA RD CHERUVUKOMMUPALEM ONGOLE MANDAL PARKASAM DISTRICT ANDHRA PARDESH INDIA	55457
Chlorpyrifos	DOW AGROSCIENCES AUSTRALIA LTD	DE-NOCIL CROP PROTECTION LTD A-1 LOTE PARSHURAMM INDUSTRIAL AREA KHED RATNAGIRI 415722 MAHARASHTRA INDIA	56174
Chlorpyrifos Manufacturing Concentrate	Dow AgroSciences Australia Limited	3M Canada Inc 1840 Oxford Street East London Ontario NSV 3R6 CANADA	49124
Chlorpyrifos Manufacturing Concentrate	Dow AgroSciences Australia Limited	Dow Agro Sciences Ltd Estuary Road North Lynn, King's Lynn Norfolk PE30 2JD UNITED KINGDOM	49340
Chlorpyrifos-methyl	Dow AgroSciences Australia Limited	Dow Agro Sciences Ltd Estuary Road North Lynn, King's Lynn Norfolk PE30 2JD UNITED KINGDOM	44035
Chlorpyrifos-methyl	Imtrade AgroSciences Pty Ltd	Sharda International F/15 GIDC Estate Phase II Gujarat INDIA	52794

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Chlorpyrifos-methyl	AGROGILL CHEMICALS PTY LTD	BHAGIRADHA CHEMICALS & INDUSTRIES LIMITED YERAJARLA RD CHERUVUKOMMUPALEM VILLAGE ONGOLE MANDAL PRAKASAM DISTRICT ANDHRA PRADESH INDIA	55828
Chlorsulfuron	4 Farmers Pty Ltd	Liyang Chemical Factory Ping Ling Dong Road South Suburb Liyang Jiangsu 213300 CHINA	44541
Chlorsulfuron	NUFARM AUSTRALIA LIMITED	Shenyang Pesticide Factory No 101 Haitage Street Sujiatun District Shenyang Liaoning Province CHINA	46567
Chlorsulfuron	Nufarm Australia Limited	Panyu Cheng Yue Chemical Co Ltd Jiao Tan Work Area Shilou Panyu Guangzhou CHINA	46068
Chlorsulfuron	Du Pont (Australia) Limited	E I du Pont de Nemours & Co., Inc. DuPont Agricultural Chemicals Ltd 3055 Pu Dong Bei Lu Shanghai 200137 PEOPLE'S REPUBLIC OF CHINA	44447
Chlorsulfuron	Du Pont (Australia) Ltd	E. I. du Pont de Nemours & Co., Inc C\o Du Pont Agrichemicals Caribe Inc. Manati Plant Carr 686, Km 2.3 Manati 0070 PUERTO RICO	44409

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Chlorsulfuron	Du Pont (Australia) Ltd	E. I. du Pont de Nemours & Co., Inc C\o Du Pont de Nemours (Flandre) S.A. route du pres fevrier 59279 LOON-PLAGE FRANCE	46845
Chlorsulfuron	Farmoz Pty Ltd	Choseright Limited C\o Shenyang Pesticide Factory No 16 Ren Min Dong Road Sujiatun, Shenyang 110101 Liaoning Province CHINA	46032
Chlorsulfuron	Farmoz Pty Ltd	Choseright Limited C\o Shenyang Pesticide Factory 101 Haitang Street Sujiatun District, Shenyang Liaoning Province CHINA	46490
Chlorsulfuron	Generex Australia Pty Ltd	Jiangsu Institute of Ecomones Researsh Experimental Plant 102 Xiemen Ave Jintan Jiangsu Province 213200 CHINA	47042
Chlorsulfuron	Mankind Enterprises (Aus) Pty Ltd	Zehjiang Xinanjiang Industrial Chemical Group Holdings Company Limited 93 Big Bridge Road Zinanjiang City CHINA	48794
Chlorsulfuron	Sanonda (Australia) Pty Ltd	Hubei Sanonda Co Ltd No 1 East Beijing Road Shashi City Hubei 434011 CHINA	46720

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Chlorsulfuron	NUFARM AUSTRALIA LIMITED	Jiangsu Institute of Ecomones 102 Ximen Street Jintan Jiangsu 213200 PEOPLE'S REPUBLIC OF CHINA	52921
Chlorsulfuron	BECOT PTY LTD T/AS IMTRADE COMMODITIES	JINZHEN CHEMICAL LTD CO DONG CUN BRIDGE DIANCHANG ROAD, JIN TAN CITY JIANGSU 213200 PR CHINA	54016
Chlorsulfuron	GULMOHAR PTY LTD	LIYANG LIHUA CHEMICAL LTD. COMPANY 147 PINGLING ROAD EAST LIYANG TOWN P.R. CHINA	56473
Chlorthal-dimethyl	ISK Oceania Pty Ltd	ISK Biosciences Corporation Greens Bayou Plant 2239 Haden Road Houston Texas 77015 USA	44313
Chlorthal-dimethyl	NUFARM AUSTRALIA LIMITED	Kasmac Chemical Industries Company Tu Tian Road Yangfusan Industrial Zone Wenzhou CHINA	52641
Chlorthal-dimethyl	Amvac Chemical UK Ltd (C/o Protech Consulting Pty Ltd)	SDS Biotech K.K. 5-6 Shiba 2-chome Minato-ku Tokyo, 105-0014 JAPAN	53742

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Chlorthal-dimethyl	CROP CARE AUSTRALASIA PTY LTD	SHANDONG LUKANG PHARMACEUTICAL GROUP CO LTD 132 GULHUAI RD JINING SHANDONG P.R. CHINA	55604
Cholecalciferol	Bell Laboratories Inc	Fort Dodge Animal Health Holland C.J. van Houtenlaan 36 1381 CP WEESP THE NETHERLANDS	44480
Cholecalciferol Manufacturing Concentrate	Bayer CropScience Pty Ltd	Fort Dodge Animal Health Holland C.J. van Houtenlaan 36 1381 CP WEESP THE NETHERLANDS	44251
Cinmethylin	BASF AUSTRALIA LTD	DUPONT AGRICULTURAL PRODUCTS HIGHWAY 43, AXIS, AL 36505-0525 USA	54365
Clethodim	BASF Australia Ltd	Eastman Chemical Company 2800 Gap Road Batesville Arkansas 72503 USA	44323
Clethodim	ARVESTA CORPORATION	Eastman Chemical Company 2800 Gap Road Batesville Arkansas 72503 USA	51099

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Clethodim Manufacturing Concentrate	SANPLUS PTY LTD	JIANGSU INSTITUTE OF ECOMONES CO LTD 98 MINJIANG RD HI-TECH DEVELOPMENT ZONE CHANGZHOU, JIANGSU 213022 PR CHINA	57985
Clethodim Manufacturing Concentrate	NUFARM AUSTRALIA LIMITED	JIANGSU INSTITUTE OF ECOMONES CO LTD 98 MINJIANG RD HI-TECH DEVELOPMENT ZONE CHANGZHOU JIANGSU 213022 PR CHINA	57986
Clethodim Manufacturing Concentrate	ARVESTA CORPORATION	EASTMAN CHEMICAL COMPANY 2800 GAP ROAD BATESVILLE ARKANSAS 72503 USA	58171
Climbazole	DIFA CHEMICAL INDUSTRIES PTY LTD	HAARMANN & REIMER GMBH MUHLENFELDSTRASSE 1 D-37603 HOLZMINDEN GERMANY	55241
Clodinafop-propargyl	Syngenta Crop Protection Pty Limited	Syngenta Crop Protection Monthey AG Monthey Plant Usine de Monthey CH - 1870 Monthey SWITZERLAND	46335
Clodinafop-propargyl	Syngenta Crop Protection Pty Limited	Syngenta Grimsby Pyewipe Grimsby NE Lincolnshire DN31 2SR UNITED KINGDOM	48477
Clofentezine	Makhteshim-Agan (Australia) Pty Limited	Aventis UK Limited Hauxton Cambridge CB2 5HU UNITED KINGDOM	44311

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Clomazone	FMC (Chemicals) Pty Limited	FMC Corporation Agricultural Chemical Group 1701 East Patapasco Avenue Baltimore Maryland 21226 USA Or ZHEJIANG LIANHE CHEMICAL CO. LTD SANJIANG ROAD HUANGYAN ZHEJIANG 215008 CHINA	44397
Clopyralid	Dow AgroSciences Australia Limited	Dow Agro Sciences LLC The Dow Chemical Company Loveridge Road Pittsburgh California 94565 USA	44332
Clopyralid	NUFARM AUSTRALIA LIMITED	Lier Chemical Industry Co. 256 Nanjiao Industrial Park Mianyang Sichuan 621000 PEOPLE'S REPUBLIC OF CHINA	53379
Clopyralid	Gulmohar Pty Ltd	Lier Chemical Industry Co., Ltd 256 Nanjiao Industrial Park Mianyang Sichuan 621000 PEOPLE'S REPUBLIC OF CHINA	53536
Clopyralid	4Farmers Pty Ltd	Lier Chemical Industry Co. Ltd 256 Nanjiao Industrial Park Mianyang Sichuan 621000 PEOPLE'S REPUBLIC OF CHINA	53940

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Clopyralid Manufacturing Concentrate	Dow AgroSciences Australia Limited	Dow Agro Sciences LLC The Dow Chemical Company Loveridge Road Pittsburgh California 94565 USA	44537
Clopyralid Manufacturing Concentrate	DOW AGROSCIENCES AUSTRALIA LIMITED	DOW AGROSCIENCES LLC LOVERIDGE RD PITTSBURGH CA 94565 USA	55989
Cloquintocet-mexyl	Syngenta Crop Protection Pty Limited	Syngenta Crop Protection Monthey AG Monthey Works Usine de Monthey CH-1870 Monthey SWITZERLAND	46336
Cloquintocet-mexyl	Syngenta Crop Protection Pty Limited	Syngenta Crop Protection Schweizerhalle AG Werk Schweizerhalle Industriestrasse CH-4133 Schweizerhalle SWITZERLAND	48478

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Clothianidin	SUMITOMO CHEMICAL TAKEDA AGRO COMPANY LTD	SUMITOMO CHEMICAL TAKEDA AGRO COMPANY LTD HIKARI PLANT 4720 TAKEDA, MITSUI HIKARI YAMAGUCHI 743 8502 JAPAN	54438
Clothianidin	SUMITOMO CHEMICAL TAKEDA AGRO COMPANY LTD	BAYER CROPSCIENCE GMBH AGROCHEMICAL TECHNICAL PLANT D-51368 LEVERKUSEN BAYERWERK WUPPERTAL GERMANY	55002
Copper octanoate	COLIN CAMPBELL (CHEMICALS) PTY LTD	COLIN CAMPBELL (CHEMICALS) PTY LTD 5 BLACKFRIAR PL WETHERILL PARK NSW 2164 AUSTRALIA	53084
Coumatetralyl	Bayer CropScience Pty Ltd	BAYER CROPSCIENCE GMBH AGROCHEMICAL TECHNICAL PLANT D-51368 LEVERKUSEN BAYERWERK WUPPERTAL GERMANY	44211
Coumatetralyl	Farmoz Pty Limited	ACT Chem Co Dashen Town Yixing City Jiangsu 214267 PEOPLE'S REPUBLIC OF CHINA	54214
Cyanamide Manufacturing Concentrate	Crop Care Australasia Pty Ltd	SKW Trostberg AG Dr Albert-Frank Strasse 32 D-83308 Trostberg GERMANY	44124

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Cyanamide Manufacturing Concentrate	DUOMAX AGRO-DEVELOPMENT PTY LIMITED	NINGXIA DARONG CHEMICALS & METALLURGY CO LTD DARONG RD DAWUKOU SHIZUISHAN 753001 PR CHINA	59013
Cyanazine	BASF Australia Ltd	Degussa Antwepen N.V. Frans Tijsmanstunnel B-2040 Antwerpen BELGIUM	44037
Cyanazine	BASF Australia Ltd	Griffin Corporation 2509 Rocky Ford Road Valdosta Georgia 31602 USA	44556
Cyanazine	BASF Australia Ltd	E. I. du Pont de Nemours & Co Inc Mobile Manufacturing Center Axis Alabama 36505 USA	48284

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Cyanazine	GULMOHAR PTY LTD	SHANDONG DACHENG PESTICIDE CO., LTD 25 HONGGOU ROAD ZHANGDIAN ZIBO SHANDONG P.R. CHINA	56474
Cyclanilide	BAYER CROPSCIENCE PTY LTD	BAYER CROPSCIENCE GMBH HULS AKTIENGESCELLSCHAFT WERK LULSDORF D-53852 NIEDERKASSEL GERMANY OR BAYER CROPSCIENCE COMPANY 8400 HAWTHRON RD KANSAS CITY MISSOURI 64120-0013 USA	48547
Cyclanilide	BAYER CROPSCIENCE PTY LTD	CEDAR CHEMICAL CORPORATION 49 PHILIP'S RD 311 HELENA ARKANSAS 72342 USA	55603
Cyfluthrin	Bayer CropScience Pty Ltd	Mitchell Cotts Chemicals Limited Steanard Lane Mirfield West Yorkshire WF14 8QB UNITED KINGDOM	44244
Cypermethrin	AUSTRALIAN PHARMACEUTICAL PARTNERS PTY LIMITED	Chinoin Pharmaceutical & Chemical Works Business Unit of Agrochemicals Banyaleg u.2 1225 Budapest POB 49 HUNGARY	47726

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Cypermethrin	NUFARM AUSTRALIA LIMITED	L.G. CHEMICAL LTD ONSAN PLANT 580 HWASAN-RI ONSAN-EUP ULJU-GUN ULSAN CITY KYONGNAM 689-890 KOREA	44400
Cypermethrin	FMC (Chemicals) Pty Limited	FMC Corporation Agricultural Chemical Group 1701 East Patapsco Avenue Baltimore Maryland 21226 USA	45537
Cypermethrin	Lief Petroleum Pty Ltd	Mitsu Industries Limited Plot No: 304/2 GIDC Vapi – 396 195 Gujarat INDIA	48604
Cypermethrin	HALLEY INTERNATIONAL ENTERPRISE (AUSTRALIA) PTY LTD	Mitsu Industries Limited Plot No: 304/2 GIDC Vapi – 396 195 Gujarat INDIA	51240
Cypermethrin	United Phosphorus Limited	United Phosphorus Limited 11 GIDC Vapi Gujarat 396 195 INDIA	48548
Cypermethrin	Farmoz Pty Limited	Meghmani Organics Limited Plot No. 403-404-452 Post Chharodi Taluke Sanand District Ahmedabad Gujarat State INDIA	51671

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Cypermethrin	Imtrade AgroSciences Pty Ltd	Bharat Rasayan Limited 2 KM, Village Mokhra Madina Mokhra Road Rohtak, 124022 Haryana INDIA	51749
Cypermethrin	Imtrade AgroSciences Pty Ltd	Tagros Chemicals India Limited A 4/1 Sipcot Industrial Complex Pachayankuppam Cuddalore 607-005 INDIA	51810
Cypermethrin	HALLEY INTERNATIONAL ENTERPRISE (AUSTRALIA) PTY LTD	Mitsu Industries Limited Plot No. 304/2 GIDC Vapi – 396195 Gujarat INDIA	53226
Cypermethrin	Novartis Animal Health Australasia Pty Limited	Mitchell Cotts Chemicals Limited Steanard Lane Mirfield West Yorkshire WF14 8QB UNITED KINGDOM	48812
Cypermethrin	Redox Chemicals Pty Ltd	Chemotecnica Sintyal SA Carlos Berg 3669 1437 - Buenos Aires ARGENTINA	44250
Cypermethrin	Swift and Company Limited	Mitchell Cotts Chemicals Limited Steanard Lane Mirfield West Yorkshire WF14 8QB UNITED KINGDOM	44004
Cypermethrin	Syngenta Crop Protection Pty Limited	Syngenta Agrochemicals Cold Creek Plant US Highway 43 Bucks Alabama 36512 USA	44116

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Cypermethrin	Fort Dodge Australia Pty Limited	Cyanamid Quimica do Brazil Ltda AV Roberto Simonsom 1,500, Centro Industrial CEP;13140000 Paulina SP BRAZIL	44293
Cypermethrin	Dow AgroSciences Australia Limited	Sanachem (Pty) Ltd Old Mill Site Canelands 4341 SOUTH AFRICA	46315
Cypermethrin	Gharda Australia Pty Ltd	Gharda Chemicals Ltd D-1/2 MIDC Lote Parshuram Pin - 415 722 Tal Khed District Ratnagiri Maharashtra INDIA	45757
Cypermethrin	SIPCAM PACIFIC AUSTRALIA PTY LTD	Bilag Industries Limited 306/3, Second Phase G I D C, Vapi Gujarat INDIA	53488
Cypermethrin	TIGER INVESTMENTS PTY LTD T/A TIGER CHEMICAL COMPANY	ISAGRO (ASIA) AGROCHEMICALS PVT LTD 640 G.I.D.C. INDUSTRIAL ESTATE PANOLI DISTRICT BHARUCH 394 116 GUJARAT STATE INDIA	54329
Cypermethrin	Agrogill Chemicals Pty Ltd	Meghmani Organics Limited Block No. 403, 404, 452, Village Chharodi Taluka-Sanand District Ahemdabad Gujarat INDIA	55456

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Cypermethrin	NOVARTIS ANIMAL HEALTH AUSTRALASIA PTY LIMITED	ISAGRO (ASIA) AGROCHEMICALS PVT LTD 640 G.I.D.C. INDUSTRIAL ESTATE PANOLI DISTRICT BHARUCH 394 116 GUJARAT STATE INDIA	57862
Cypermethrin	FMC (CHEMICALS) PTY LIMITED	JIANGSU CHEMICAL PESTICIDE GROUP 1 NANMEN RD SUZHOU PR CHINA	58156
Cyphenothrin	Sumitomo Chemical Australia Pty Ltd	Sumitomo Chemical Company Limited Misawa Works Aza-Sabisirotai Misawa City, Aomori 033-01 JAPAN	50874
Cyproconazole	Syngenta Crop Protection Pty Limited	Syngenta Crop Protection Schwiezerhalle AG Production Plant Muttenz Rothausstrasse 61 CH-4133 Pratteln SWITZERLAND	44132
Cyprodinil	Syngenta Crop Protection Pty Limited	Syngenta Crop Protection Monthey AG Monthey Plant Usine de Monthey CH - 1870 Monthey SWITZERLAND	44504
Cyromazine	Novartis Animal Health Australasia Pty Limited	Ciba-Geigy SA Usine de St Fons F-69191 Saint-Fons Cedex FRANCE	44328
Cyromazine	Novartis Animal Health Australasia Pty Limited	Syngenta Grimsby SA Pyewipe GB-Grimsby South Humberside DN31 2SR UNITED KINGDOM	47885

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Cyromazine	Novartis Animal Health Australasia Pty Limited	SpecialtyChem Products Corporation 2 Stanton Street Marianette Wisconsin 54143 USA	49499
Cyromazine	Novartis Animal Health Australasia Pty Ltd	Shanghai Novartis Animal Health Ltd Wusi Farm Factory Feng Xina County CHI-Wisu Farm,Shanghai,201423 CHINA	51156
Cyromazine	Langey Holdings Pty Ltd	ACT Chem Co. Dashen Town Yining City Jiangsi P.C. 214267 PEOPLE'S REPUBLIC OF CHINA	44338
Cyromazine	Ancare Australia Pty Limited	Zhejiang Donggang Industry & Trade Group 83 Jiefang North Road Jiaojiang 31800 Zhejiang PEOPLE'S REPUBLIC OF CHINA	51257
Cyromazine	Novartis Animal Health Australasia Pty Ltd	Shanghai Novartis Animal Health Co. Ltd Wusi Farm Factory Fengxian County CHI-Wusi Farm Shanghai 201423 CHINA	52254
Cyromazine	Virbac (Australia) Pty Limited	Taizhou Dankong Pharmaceutical & Chemical Factory Yan Tou Industrial Estate JiaoJiang, TaiZhou City ZheJiang PEOPLE'S REPUBLIC OF CHINA	52551

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Cyromazine	Jurox Pty Limited	Tiazhou Dankong Pharmachem Factory Yantou Industrial Area Jiaojiang District Taizhou City Zhejiang Province PEOPLE'S REPUBLIC OF CHINA	52748
Cyromazine	4Farmers Pty Ltd	Wenzhou Pesticide Factory 61 Huiqiao Road Zhejiang 325003 PEOPLE'S REPUBLIC OF CHINA	54056
Dalapon-sodium	Agspray Chemical Co. Pty Ltd	Agrorus Ltd OAO "Ssredno Volzhski Zarod Himikatov" 446100, Chapaevsk Samarska Obl RUSSIA	50995
Dalapon-sodium	Nufarm Australia Limited	Sredne-Volzhnsky Chemicals Plant 1 Ordzhonikidze Street 446100, Chapayevsk, Samara Region RUSSIA	51402
Dalapon-sodium	NUFARM AUSTRALIA LIMITED	Hegang Heyou Pesticide Co Limited 45 Factory Road Gongnong District Hegang CHINA	52196
Dalapon-sodium	Farmoz Pty Limited	Choseright Limited C/o Guandong Panyu Shilou Fine Chemical Factory Jiao Tang Industrial Estate Shilou Town Panyu City Guangdong PEOPLE'S REPUBLIC OF CHINA	53108

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Daminozide	CROMPTON SPECIALTIES PTY LTD	Uniroyal Chemical Company Inc Rubicon Plant 520 River Oaks Drive Geisemar Louisiana 70734 USA	44356
Daminozide	Fine Agrochemicals Limited (UNITED KINGDOM)	SNPE Chimie Chemin de la Loge 31078 Toulouse Cedex 4 FRANCE	54780
Dazomet	CERTIS AUSTRALIA PTY LIMITED	BASF Aktiengesellschaft Carl-Bosch Strasse 38 6700 Ludwigschafen am Rhein GERMANY	44459
Deltamethrin	Bayer CropScience Pty Ltd	Aventis Pharma SA 31-33 Quai Armand Barbes 69583 Neuville sur saone cedex FRANCE	44103
Deltamethrin	Gharda Australia Pty Ltd	Gharda Chemicals Ltd D-1/2 MIDC Lote-Parshuram 415 722 Tal Khed District Ratnagiri Maharashtra INDIA	44443
Deltamethrin	Makhteshim-Agan (Australia) Pty Limited	Makhteshim Chemical Works Limited Industria de Defensivos Agricolas SA (Defensa SA) Rua Padre Chagas 79-7° Andar 90570-080 Porto Alegre – RS BRAZIL	51901
Deltamethrin	Tri-Delta Chemicals Pty Ltd	Isagro (Asia) Agrochemicals Private Limited 640 G.I.D.C. Industrial Estate Panoli 394116 Gujarat INDIA	53478

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Deltamethrin	Unisun Chemicals Pty Limited	Red Sun Group Corporation 269 Baota Road Gaochun County Nanjing PEOPLE'S REPUBLIC OF CHINA	53775
Deltamethrin	eChem Australia Pty Ltd	Sharda International Plot No. 169/1/A G.I.D.C., Naroda Phase - I Ahmedabad Gujarat INDIA	54093
Deltamethrin	Bayer CropScience Pty Ltd	Bilag Industries Limited Plot # 304/2, II Phase GIDC, Vapi 396 195 Gujarat INDIA	55628
Deltamethrin	BECOT PTY LTD T/AS IMTRADE COMMODITIES	TAGROS CHEMICALS INDIA LTD A-4/1 SIPCOT INDUSTRIAL COMPLEX CUDDALORE-3 TAMILNADU INDIA	55232
Deltamethrin	TIGER INVESTMENTS PTY LTD T/A TIGER CHEMICAL COMPANY	ISAGRO (ASIA) AGROCHEMICALS PRIVATE LTD 640 G.I.D.C. INDUSTRIAL ESTATE PANOLI-394116 GUJARAT STATE INDIA	56091
Deltamethrin Manufacturing Concentrate	Bayer CropScience Pty Ltd	Provalis 160 route Velentine 13 011 Marseille FRANCE	51601

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Diafenthiuron	Syngenta Crop Protection Pty Limited	Syngenta Crop Protection Monthey AG Monthey Plant Usine de Monthey CH - 1870 Monthey SWITZERLAND	46431
Diazinon	Makhteshim-Agan (Australia) Pty Ltd	Makhteshim Chemical Works Ltd New Industrial Estate Beer-Sheva 84100 ISRAEL	44033
Diazinon	ZAGRO SINGAPORE PTE LTD	CIBA SPECIALITY CHEMICALS MCINTOSH PLANT GEIGY ROAD MCINTOSH ALABAMA 36553 USA	44289
Diazinon	ZAGRO SINGAPORE PTE LTD	CIBA SPECIALITY CHEMICALS MCINTOSH PLANT GEIGY ROAD MCINTOSH ALABAMA 36553 USA	44290
Diazinon	ZAGRO SINGAPORE PTE LTD	Nippon Kayaku Co., Ltd Kashima Factory 6-Sunayama, Hasaki-Machi Kashima-Gun, Ibaraki-pref. JAPAN	44561
Diazinon	NIPPON KAYAKU CO LTD	Nippon Kayaku Company Ltd Kashima Factory 6-Sunayama Hasaki-Machi Kashima-Gun, Ibaraki-Pref. JAPAN	46132
Diazinon	VIRBAC (AUSTRALIA) PTY LTD	Nippon Kayaku Company Ltd Kashima Factory 6-Sunayama Hasaki-Machi Kashima-Gun, Ibaraki-Pref. JAPAN	44430

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Diazinon Manufacturing Concentrate	ZAGRO ANIMAL HEALTH PTE LTD	CIBA SPECIALITY CHEMICALS MCINTOSH PLANT GEIGY ROAD MCINTOSH ALABAMA 36553 USA	44291
Dicamba	Syngenta Crop Protection Pty Limited	BASF Corporation Route No 4 Beaumont Texas 77705 USA	44512
Dicamba	Gharda Australia Pty Ltd	Gharda Chemicals Ltd D 1/2 Lote Parshuram Lote, Tal Khed Dist. Ratnagiri 415722 Maharashtra State INDIA	52040
Dicamba	Farmoz Pty Limited	Chemtech Company Limited Zhejiang Sheng Biok Biology Co. Limited Zhongguan Industrial Park, Deqing Zhejiang 313220 PEOPLE'S REPUBLIC OF CHINA	53708
Dicamba	NUFARM AUSTRALIA LIMITED	Jiangsu Institute of Ecomones 102 Ximen Street Jintan Jiangsu 213200 PEOPLE'S REPUBLIC OF CHINA	53804
Dicamba	CONQUEST AGROCHEMICALS PTY LTD	KASMAC CHEMICAL INDUSTRY CO LTD JIANGSU INSTITUTE OF ECOMONES 102 XIMEN ST JINTAN JIANGSU 213200 PEOPLES REPUBLIC OF CHINA	56569

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Dicamba	IMTRADE AGROSCIENCES PTY LTD	SINOCHEM HEBEI IMP & EXP CORPORATION 707 LIANMENG ROAD SHIJIAZHUANG P.R. CHINA	57842
Dicamba dimethyl ammonium	GHARDA AUSTRALIA PTY LTD	GHARDA CHEMICALS LIMITED D-1/2 MIDC LOTE PARSHURAM PIN 415 722 TAL KHED DISTRICT RATNAGIRI MAHARASHTRA INDIA	55328
Dichlobenil	CROMPTON SPECIALTIES PTY LTD	CROMPTON EUROPE B.V. ANKERWEG 18 1041 AT AMSTERDAM THE NETHERLANDS	44353
Dichlobenil	Andre de Rozario t/as A.D.R. Engineering	Yangzhou Tiachen Fine Chemical Factory Guazhou Town Yangzhou Jiangsu Province 225129 PEOPLE'S REPUBLIC OF CHINA	53486
Dichlofluanid	Bayer CropScience Pty Ltd	BAYER CROPSCIENCE AG BCS IOP A.I. MANUFACTURING ALTE HEERSTRASSE BUILDING A603 D-41538 DORMAGEN GERMANY	44072
Dichlorophen	Amtrade International Pty Ltd	NIPA Laboratories Nook Lane Oswaldtwistle Accrington Lancashire BB5 3PQ ENGLAND	46257
Dichlorprop	Nufarm Australia Limited	Nufarm UK Limited Crabtree Manorway North Belvedere Kent DA17 6BQ UNITED KINGDOM	49443

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Dichlorvos	Sara Lee Household and Body Care (Australia) Pty Ltd	Amvac Chemical Corporation 4100 East Washington Boulevard Los Angeles California 90023 - 4406 USA	49486
Dichlorvos	Novartis Animal Health Australasia Pty Limited	Syngenta Crop Protection Monthey AG Monthey Plant Usine de Monthey CH-1870 Monthey SWITZERLAND	44578
Dichlorvos	United Phosphorus Limited	United Phosphorus Ltd GIDC Ankleshwar Gujarat 393 002 INDIA	48353
Dichlorvos	AMVAC CHEMICAL UK LIMITED	AMVAC CHEMICAL CORPORATION 4100 E. WASHINGTON BLVD. LOS ANGELES, CA 90023 USA	56689
Diclofop-methyl	BAYER CROPSCIENCE PTY LTD	BAYER CROPSCIENCE GMBH CHEMIE PARK KNAPSACK BUILDING 1440 D-50351 HURTH GERMANY	44358
Diclofop-methyl	NUFARM AUSTRALIA LIMITED	Hegang Farm Chemicals Pesticide Ltd No 45 Gongchang Road Hegang Heilongjiang 154108 CHINA	44501
Diclofop-methyl	Imtrade AgroSciences Pty Ltd	Rallis India Limited Plot No: 3301 GIDC Industrial Area Ankleshwar District Bharuch Gujarat INDIA	44157

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Diclofop-methyl	Nufarm Australia Limited	Hegang Pesticide Factory Factory Road Gong Nong District Hegang City CHINA	44513
Diclofop-methyl	Nufarm Australia Limited	Jingma Chemicals Limited National Kunshan Chemical Plant 21 Caoyang Zhilu, Kunshan Jiangsu Province 215300 P.R.CHINA	51808
Diclofop-methyl	NUFARM AUSTRALIA LIMITED	Zhejiang Yifan Agricultural Chemical Factory Huangshi Airport Da Dao Wenzhou CHINA	52457
Diclofop-methyl	Becot Pty Ltd T/as Imtrade Commodities	Wenzhou Zhenan Medicine Factory No. 26 Tutian Road Yangfushan Industry Zone Wenzhou Zhejiang 325003 PEOPLE'S REPUBLIC OF CHINA	54012
Diclofop-methyl	Agrogill Chemicals Pty Ltd	Jingma Chemicals Limited National Kunshan Chemical Plant 21 Caoyang Zhilu Kunshan Jiangsu Province 215300 PEOPLE'S REPUBLIC OF CHINA	54431
Diclofop-methyl	Nufarm Australia Limited	Zhejiang Yifan Agriculture Chemical Factory No. 2, Zone 4 Development Zone Fuping Wenzhou Zhejiang 325013 PEOPLE'S REPUBLIC OF CHINA	54246

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Dicofol	Farmoz Pty Ltd	Society Montecinca S.A. Camino de Acipres S/N Poligono Industrial Paules 22400 - Monzon (Huesca) SPAIN	47014
Dicofol	Dow AgroSciences Australia Limited	Rohm & Haas Italia S.r.L. Strada Stalale 11 Kilometro 190.200 Mozzanica (Bergamo) ITALY	44217
Dicyclanil	Novartis Animal Health Australasia Ltd	Syngenta Grimsby Limited Pyewipe Grimsby NE Lincolnshire DN31 2SR UNITED KINGDOM	51445
Dicyclanil	NOVARTIS ANIMAL HEALTH AUSTRALASIA PTY LIMITED	SYNGENTA CROP PROTECTION MUNCHWILEN AG ENTWICKLUNGS ZENTRUM AGRO (EZA) BREITENLOH 180 MUNCHWILEN SWITZERLAND or LONZA LTD VALAIS WORKS 3939 VISP SWITZERLAND	44028
Diethyltoluamide	Amtrade International Pty Ltd	Morflex Inc 2110 High Point Road Greenboro North Carolina 27403 USA	46317
Diethyltoluamide	Clariant (Australia) Pty Ltd	Hoechst Celanese Corporation Sou-Tex Plant 624 East Catawba Ave Mt Holly NC 28120 USA	47276

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Diethyltoluamide	MGK Asia Pacific Pty Limited	Morflex Inc 2110 High Point Road Greenboro North Carolina 27403 USA	46457
Diethyltoluamide	MGK Asia Pacific Pty Limited	Nippon Fine Chemical Co., Ltd Takasago Plant 1-1, 5-chome, Umei Takasago, Hyogo 676 JAPAN	48731
Difenoconazole	Syngenta Crop Protection Pty Limited	Syngenta Crop Protection Monthey AG Monthey Plant Usine de Monthey CH - 1870 Monthey SWITZERLAND	44456
Difenoconazole	FARMOZ PTY LIMITED	JIANGSU HUIFENG AGROCHEMICAL CO LTD LONGDI SOUTH STREET DAFENG JIANGSU PROVINCE 224173 PR CHINA	58172
Difethialone	Bayer CropScience Pty Ltd	Lipha Lyonnaise Industrielle Pharmaceutique Centre de Production 10 Avenue de Lattre de Tassingy 69330 Meyzieu FRANCE	45234
Diflubenzuron	SCHERING-PLOUGH PTY LIMITED	HEBEI VIAN BIO-CHEMICAL CO LTD 393 EAST HEPING ROAD SHIJIAZHUANG 050031 HEBEI PROVINCE PR CHINA	49480
Diflubenzuron	CROMPTON SPECIALTIES PTY LTD	CROMPTON EUROPE B.V. ANKERWEG 18 1041 AT AMSTERDAM THE NETHERLANDS	44170

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Diflubenzuron	Gharda Australia Pty Ltd	Gharda Chemicals Ltd D-1/2 M.I.D.C. Lote Parshuram 415 722 Tal. Khed District Ratnagiri Maharashtra INDIA	52625
Diflubenzuron	AGROGILL CHEMICALS PTY LTD	DONGBU FINE CHEMICALS CO LTD 433 MOKNAE-DONG ANSAN-SI KYUNGGI-DO 425-100 KOREA	55927
Diflubenzuron	INTERVET RURAL CO. PTY LTD	CHAMPION FARMOQUIMICO VIA PRINCIPAL LOTE 12 DAIA ANAPOLIS - GOIAS BRAZIL	56460
Diflufenican	BAYER CROPSCIENCE PTY LTD	BAYER CROPSCIENCE LTD SWEETBRIAR RD NORWICH NORFOLK NR6 5AP UNITED KINGDOM	44135
Diflufenican	NUFARM AUSTRALIA LIMITED	Shenyang Research Institute Of Chemical Industry 8 Shenliaodong Road Tiexi District Shenyang Liaoning 110021 PEOPLE'S REPUBLIC OF CHINA	53806
Diflufenican	Farmoz Pty Limited	Hebei Wanquan Chemtech Company Limited C/- Changzhou Pesticides Factory Longhutang xinqu Changzhou Jiangsu Province PEOPLE'S REPUBLIC OF CHINA	53890

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Diflufenican	Makhteshim-Agan (Australia) Pty Limited	Agan Chemical Manufacturers Limited Northern Industrial Zone Ashdod 77102 ISRAEL	54290
Diflufenican	SIPCAM PACIFIC AUSTRALIA PTY LTD	Shenyang Research Institute of Chemical Industry 8 Shenliaodong Road Tiexi District Shenyang Liaoning 110021 PEOPLE'S REPUBLIC OF CHINA	55016
Diflufenican	CONQUEST AGROCHEMICALS PTY LTD	Shenyang Research Institute of Chemical Industry 8 Shenliaodong Road Tiexi District Shenyang Liaoning 110021 PEOPLE'S REPUBLIC OF CHINA	55017

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Diflufenican	NUFARM AUSTRALIA LIMITED	NUFARM SA NOTRE-DAME-DE-LA-GARENNE Z1 SECTEUR C27600, GAILLON FRANCE	55826
Diflufenican	UNITED FARMERS COOPERATIVE COMPANY LTD	JINGMA CHEMICALS LTD 6 FLOOR-C, BUILDING 1 HUAZHE PLAZA HANGZHOU, 310006 P.R. CHINA	55850
Diflufenican	PACIFIC AGRISCIENCE PTY LTD	JIANGSU CHANGLONG CHEMICALS CO., LTD LONGHU TANG NEW DISTRICT OF CHANGZHOU JIANGSU 213031 P.R. CHINA	57937
Diflufenican	CHEMINOVA AUSTRALIA PTY LIMITED	CHEMINOVA AGRO A/S THYBORONVEJ 76-78 DK-7673 HARBOORE DENMARK	56822
Dimethenamid-P	BASF AUSTRALIA LTD	BASF CORPORATION WEST PORT ARTHUR RD BEAUMONT TX 77705 USA	56093
Dimethipin	CROMPTON SPECIALTIES PTY LTD	Reutgers-Nease Chemical Co Inc. 201 Strubler Road State College, Pennsylavania 16801 USA	44280
Dimethirimol	Syngenta Crop Protection Pty Limited	Zeneca Fine Chemicals Manufacturing Organisation Grangemouth Works Earls Road Grangemouth Stirlingshire FK3 8XG UNITED KINGDOM	44133

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Dimethoate	Cheminova Australia Pty Limited	Cheminova Agro A/S Thyboronvej 78 DK-7673 Harboore DENMARK	44043
Dimethoate	Farmoz Pty Ltd	Choseright Limited C\o Guangzhou Pesticide Factory 441 Gong Ye Da Dao South Haizhou District Guangzhou Province CHINA	45924
Dimethoate	Isagro Australia Pty Ltd	Cheminova Agro A/S Thyboronvej 76-78 DK-7673 Harboore DENMARK	44442
Dimethoate	Rotam Australasia Pty Ltd	Nantong Rotam Chemicals Co Ltd 41 Yaogang Road Nantong City CHINA	48174
Dimethoate	NUFARM AUSTRALIA LIMITED	Shenyang Pesticide Factory NO. 101 Haitang Street Shenyang Liaoning CHINA	52285
Dimethoate	Cheminova Australia Pty Limited	Cheminova A/S Thyboronvej 76-78 DK-7673 Harboore DENMARK	54320
Dimethoate Manufacturing Concentrate	Cheminova Australia Pty Ltd	Cheminova Agro A/S Thyboronvej 76-78 DK-7673 Harboore DENMARK	44566

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Dimethoate Manufacturing Concentrate	Farmoz Pty Ltd	Choseright Limited C\o Guangzhou Pesticide Factory 441 Gong Ye Da Dao South Haizhou District Guangzhou Province CHINA	49020
Dimethomorph	BASF Australia Ltd	BASF S.A. Rodovia Presidente Dutra KM 300.5 27500 Resende RJ BRAZIL	44554
Dimethomorph	BASF Australia Ltd	Shell Nederland Chemie BV(Pernis) Vondelingenweg 601 3190 GB Hoogveliet-Rotterdam THE NETHERLANDS	48117
Diniconazole	BASF Australia Ltd	Sumitomo Chemical Company Limited Oita Works 2200 Tsurusaki Oita 870-01 JAPAN	44147
Dinocap	Dow AgroSciences Australia Limited	Rohm and Haas Italia S.r.L. Strada Statale 11 Kilometro 190.200 Mozzanica (Bergamo) ITALY	44531
Di-n-propyl isocinchomeronate	MGK Asia Pacific Pty Limited	McLaughlin Gormley King Company 1715 Fifth Street Minneapolis MN 55414 USA	44574
Diphenylamine	Colin Campbell (Chemical) Pty Ltd	Uniroyal Chemical Company Inc Rubicon Plant 520 River Oaks Drive Geisemar Louisiana 70734 USA	44546

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Diphenylamine Manufacturing Concentrate	E E Muir & Sons Pty Ltd	Decco Elf Atochem North America Inc. 1713-S South California Ave Monrovia California 92016 USA	44547
Diquat dibromide Manufacturing Concentrate	Syngenta Crop Protection Pty Limited	Syngenta Agrochemicals Huddersfield Works Leeds Road Huddersfield HQ 11FF UNITED KINGDOM	44219

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Diquat dibromide Manufacturing Concentrate	HALLEY INTERNATIONAL ENTERPRISE (AUSTRALIA) PTY LTD	RED SUN GROUP CORPORATION 269 BAOTA ROAD GAOCHUN COUNTY NANJING PR CHINA	56655
Diquat dibromide Manufacturing Concentrate	CONQUEST AGROCHEMICALS PTY LTD	KASMAC CHEMICAL INDUSTRY CO LTD YONGNONG CHEMICAL INDUSTRY CO LTD LAN TIAN YONG QIANG WENZHOU ZHEJIANG PR CHINA	56808
Diquat dibromide Manufacturing Concentrate	SINON AUSTRALIA PTY LIMITED	SINON CORPORATION NO 111, CHUNG SHAN RD TA-TU HSIANG TAICHUNG HSIEN 432 TAIWAN	58221
Diquat dibromide Manufacturing Concentrate	PACIFIC AGRISCIENCE PTY LTD	QINGDAO MAODE CHEMICAL INDUSTRY CO LTD HUAIHE RD QINGDAO SHI KAI FA QU SHANGDONG 266555 PR CHINA	59111
Disodium methylarsonate	Ancom Australia Pty Ltd	Ancom Crop Care SDN BHD Persiaran Selangor 40000 Shah Alam Selangor D.E. MALAYSIA	44536
Disodium methylarsonate Manufacturing Concentrate	Nuturf Pty Ltd	Drexel Chemical Company Tunica Industrial Park Highway 61 South Tunica Mississippi USA	44500

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Disodium tiludronate	CEVA SANTE ANIMALE SA	ORGAMOL SA ROUTE CANTONALE EVIONAZ (VS) CH-1902 SWITZERLAND Or SANOFI CHIMIE ROUTE D'AVIGNON 30390 ARAMON FRANCE Or SANOFI CHIMIE 45 SHEMIN DE METELINE 04201 SISTERON FRANCE	58211
Disulfoton	Bayer CropScience Pty Ltd	BAYER CROPSCIENCE CORPORATION 8400 HAWTHRON RD KANSAS CITY MISSOURI 64120-0013 USA	44114
Dithianon	BASF Australia Ltd	E. Merck Gernsheim Plant Mainzer Strasse 41 Darmstadt 64579 Gernsheim GERMANY	46405
Dithianon	Colin Campbell (Chemicals) Pty Ltd	Rallis India Limited Plot No. 3301, G.I.D.C. Industrial Area, Ankleshwar Bharuch District Gujarat, 393002 INDIA	52858

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Dithianon	RALLIS INDIA LIMITED	RALLIS INDIA LIMITED PLOT NO. 3301 GIDC INDUSTRIAL AREA ANKLESHWAR DISTRICT BHARUCH GUJARAT 393 002 INDIA	56621
Dithiopyr	Dow AgroSciences Australia Limited	Dow AgroSciences LLC at Albemarle Corporation Tyrone Industrial Park Tyrone, PA 16686 USA	46268
Diuron	Bayer CropScience Pty Ltd	BAYER CROPSCIENCE AG BCS IOP A.I. MANUFACTURING ALTE HEERSTRASSE BUILDING A603 D-41538 DORMAGEN GERMANY	44278
Diuron	Ancom Australia Pty Ltd	Ancom Crop Care SDN BHD Persiaran Selangor 40000 Shah Alam Selangor D.E. MALAYSIA	44507
Diuron	Grifin Corporation Australia Pty Ltd	Sanachem (Pty) Ltd Old Mill Site Canelands 4341 SOUTH AFRICA	45535
Diuron	DU PONT (AUSTRALIA) LTD	Griffin do Brazil Ltda Goiabal Plant Rodovia Presidente Dutra KM280 2736500 Barra Mansa RJ BRAZIL	44476

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Diuron	DU PONT (AUSTRALIA) LTD	E. I. du Pont de Nemours & Co., Inc Barranquilla Plant via 40#85-85 Barranquilla COLUMBIA	44477
Diuron	Makhteshim-Agan (Australia) Pty Ltd	Agan Chemical Manufacturers Ltd Northern Industrial Zone Ashdod 77102 ISRAEL	44484
Diuron	Mastra Corporation Pty Ltd	Mastra Corporation SDN BHD Lot 6/Jalan 5, Kawasan Perusahaan Bandar Sultan Suleiman 42000 Port Klang MALAYSIA	47275
Diuron	Nufarm Australia Limited	Nufarm Australia Limited Masons Road Kwinana Western Australia 6167 AUSTRALIA	44277
Diuron	Bayer CropScience Pty Ltd	SNPE Usine de Pont de Claix BP17 F-38800 Le Pont de Claix FRANCE	44120
Diuron	United Phosphorus Limited	United Phosphorous Limited Hall Lane Rookery Bridge Sandbach Cheshire CW11 9QQ UNITED KINGDOM	44588
Diuron	NUFARM AUSTRALIA LIMITED	Hegang Heyou Pesticide Co. Ltd 45 Factory Road Gondnong District Hegang 154108 CHINA	52458

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Diuron	Farmoz Pty Limited	EMV NORTH-HUNGARIAN CHEMICAL WORKS CO. LTD H-3792 Sajobabony HUNGARY	52556
Diuron	Rotam Australasia Pty Ltd	EMV NORTH-HUNGARIAN CHEMICAL WORKS CO. LTD H-3792, Sajobabony HUNGARY	52901
Diuron	4Farmers Pty Ltd	Shenyang Pesticide Co. Ltd No. 101 Haitang Street Sujiatun District Shenyang Liaoning 110101 PEOPLE'S REPUBLIC OF CHINA	55233
Diuron	BECOT PTY LTD T/AS IMTRADE COMMODITIES	SUZHOU WORLDBEST AGRO-BIOCHEMICAL CO. LTD MUDU, SUZHOU JIANGSU Z25101 P.R. CHINA	54623

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Diuron	AGROGILL CHEMICALS PTY LTD	EMV NORTH-HUNGARIAN CHEMICAL WORKS CO. LTD H-3792 SAJOBABONY HUNGARY	56686
Diuron	ECHEM (AUST) PTY LTD	SUZHOU WORLDBEST AGRO-BIOCHEMICAL CO. LTD MUDU SUZHOU JIANGSU Z25101 P.R. CHINA	56728
Diuron	DU PONT (AUSTRALIA) LTD	GRIFFIN BRAZIL LTDA CAMACARI PLANT RUA OXIGENIO, 748 COPEC, CAMACARI 42810-000 BRAZIL	56858
Dodine	Colin Campbell (Chemicals) Pty Ltd	Chimic-Agriphar S.A. Carretara de Puentelarra KM5, 01223 Communion (Alava) SPAIN	45617

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Domperidone	JUROX PTY LIMITED	DAE HE CHEMICAL CO LTD 1 RA 301 SHIHWA INDUSTRIAL COMPLEX SHIHUNG CITY KYONGKI-DO KOREA	55480
d-Allethrin	SUMITOMO CHEMICAL AUSTRALIA PTY LIMITED	SUMITOMO CHEMICAL COMPANY LIMITED MISAWA WORKS AZA-SABISHIROTAI OAZA-MISAWA MISAWA CITY AOMORI 033-01 JAPAN	50870
d-Allethrin	DALITPACK PTY LTD	JIANGSU YANGNONG CHEMICAL GROUP CO. LTD 39 WENFENG RD YANGZHOU JIANGSU 225009 PR CHINA	58237
d-Phenothrin	SUMITOMO CHEMICAL AUSTRALIA PTY LIMITED	SUMITOMO CHEMICAL COMPANY LIMITED MISAWA WORKS AZA-SABISHIROTAI OAZA-MISAWA MISAWA CITY AOMORI 033-01 JAPAN	50871
d-Phenothrin	DALITPACK PTY LTD	JIANGSU YANGNONG CHEMICAL GROUP CO. LTD 39 WENFENG RD YANGZHOU JIANGSU 225009 PR CHINA	58238
Emamectin benzoate	Syngenta Crop Protection Pty Limited	Merck & Co., Inc. Merck Manufacturing Division 100 Avenue C Riverside, PA 17868 USA	50921

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Emamectin benzoate	Syngenta Crop Protection Pty Limited	Syngenta Crop Protection Schweizerhalle AG Rothausweg SWITZERLAND	53732
Endosulfan	Bayer CropScience Pty Ltd	BAYER CROPSCIENCE GMBH STROOFSTRASSE 27 BUILDING 1206 D-65933 FRANKFURT AM MAIN GERMANY	44305
Endosulfan	Makhteshim-Agan (Australia) Pty Ltd	Makhteshim Chemical Works Ltd New Industrial Estate Beer-Sheva 84100 ISRAEL	44093
Endosulfan	Excel Industries (Australia) Pty Ltd	Excel Industries Ltd 6/2 Ruvapari Road Bhavnagar - 364001 Bombay 400102 INDIA	44012
Endosulfan	BECOT PTY LTD T/AS IMTRADE COMMODITIES	E.I.D. PARRY (INDIA) LIMITED 22/A - TTC INDUSTRIAL AREA THANE BELAPUR RD GHANSOLI - P.O. NAVI MUMBAI - 400 701 INDIA	57040
Endothal Manufacturing Concentrate	Atofina (Australia) Pty Ltd	Elf Atochem North America Inc Organic Chemicals Division 17168 West Jefferson Riverview Michigan 48192 USA	44181

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Epoxiconazole	BASF AUSTRALIA LTD	BASF SCHWARZHEIDE GMBH SCHIPKAUER STRASSE 1 01986 SCHARZHEIDE GERMANY	53906
Esbiothrin	Sumitomo Chemical Australia Pty Ltd	Roussel Uclaf 31, quai Aramand Barbes 69250 Neuville sur Saone FRANCE	45496
Esfenvalerate	BASF Australia Ltd	Sumitomo Chemical Company Limited Oita Works 2200 Tsurusaki Oita 870-01 JAPAN	44032
Esfenvalerate	Sumitomo Chemical Australia Pty Ltd	Sumitomo Chemical Company Limited Oita Works 2200 Tsurusaki Oita 870-01 JAPAN	50863
Ethametsulfuron-methyl	Du Pont (Australia) Limited	DuPont de Nemours (Flandre) S.A. Route Du pres fevrier 59279 Loon-Plage FRANCE	52626
Ethephon	Farmoz Pty Ltd	Choseright Limited Changshu Weicheng Plant Hormone Co., Ltd Mocheng Town Changshu City Jiangsu 215556 PEOPLE'S REPUBLIC OF CHINA	51194
Ethephon	Bayer CropScience Pty Ltd	BAYER NUFARM SA ZONE INDUSTRIELLE NO 1 NOTRE DAME DE LA GARENNE 27600 GAILLON FRANCE	44406

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Ethephon	NUFARM AUSTRALIA LIMITED	Huaiyin Electrochemical Plant 3- Huagong Road Huaiyin City Jiangsu 223002 PEOPLE'S REPUBLIC OF CHINA	52488
Ethephon	Bayer CropScience Pty Ltd	Chemie GmbH Bitterfield-Wolfen ChemiePark Areal E 06749 Bitterfield GERMANY	54337
Ethephon	GULMOHAR PTY LTD	SCIIC AGROCHEMICALS LIMITED HUANTAI TOWN ZIBO CITY SHANDONG PROVINCE P.R. CHINA	55775
Ethephon	FARMOZ PTY LIMITED	JIANGSU ANPON GROUP CORPORATION 30 HUAGONG ROAD HUAIYIN JIANGSU PR CHINA	56122
Ethephon Manufacturing Concentrate	DU PONT (AUSTRALIA) LTD	Prochrom Industrias Quimicas SA Rua Hidrogenio 3076 Polo Petrolquimico de Camacaro Camacari 42810 BRAZIL	44557
Ethephon Manufacturing Concentrate	Bayer CropScience Pty Ltd	BAYER CROPSCIENCE COMPANY AMBLER PLANT RAILROAD AVE AND MATHERS RD AMBLER PA 19002 USA	44213
Ethephon Manufacturing Concentrate	Bayer CropScience Pty Ltd	BAYER NUFARM SA ZONE INDUSTRIELLE NO 1 NOTRE DAME DE LA GARENNE 27600 GAILLON FRANCE	45314

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Ethephon Manufacturing Concentrate	DU PONT (AUSTRALIA) LTD	Changshu Yu Xiang Chemical Co. Ltd Mocheng Town Changshu Jiangsu CHINA	52567
Ethephon Manufacturing Concentrate	NUFARM AUSTRALIA LIMITED	Huaiyin Electrochemical Plant 30 Huagon Road Huaiyin City Jiangsu 223002 PEOPLE'S REPUBLIC OF CHINA	54448
Ethion	Cheminova Australia Pty Limited	Cheminova Agro A/S Thyboronvej 76-78 DK-7673 Harboore DENMARK	44189
Ethion	Imtrade AgroSciences Pty Ltd	Rallis India Ltd Thane-Belapur Road PB No. 62 KU Bazaar Thurbhe New Bombay 400 705 INDIA	48403
Ethion	Bayer CropScience Pty Ltd	BASF AGRI-PRODUCTION SAS 32 RUE DE VERDUN 76410 SAINT AUBIN LES ELBEUF FRANCE	44309
Ethofumesate	Bayer CropScience Pty Ltd	BAYER CROPSCIENCE UK LTD GORSEY LANE WIDNESS CHESHIRE WA8 0RN ENGLAND UNITED KINGDOM	44156
Ethofumesate	Farmoz Pty Ltd	Choseright Limited 1-3 Wang Lok St, Yuen Long Industrial Estate Yuen Long NT HONG KONG	44243

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Ethofumesate	Imtrade AgroSciences Pty Ltd	Sharda International F/15, GIDC Estate Phase II Gujarat INDIA	52511
Ethoprophos	Bayer CropScience Pty Ltd	BAYER CROPSCIENCE COMPANY 786 ARROW LAKE ROAD MT PLEASANT TENNESSEE 38474 USA	44015
Ethoxysulfuron	BAYER CROPSCIENCE PTY LTD	LONZA AG LONZASTRASSE WALLISER WERK CH-3930 VISP SWITZERLAND	56850
Ethyl butylacetylaminopropionate	Merck Pty Ltd	Merck Farma Y Quimica SA E-08100 Mollet del Valles (Barcelona) Apartado 47 Carretera N-152, Km 19 SPAIN	44405
Ethyl dipropylthiocarbamate	CROP CARE AUSTRALASIA PTY LTD	Syngenta Agrochemicals Cold Creek Plant US Highway 43 Bucks Alabama 36512 USA Or EMV NORTH-HUNGARIAN CHEMICAL WORKS CO. LTD EMV Eszak-Magyarorszagi Vegyimuvek Kft H-3792 SAJOBABONY HUNGARY	44592

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Etoxazole	SUMITOMO CHEMICAL AUSTRALIA PTY LIMITED	YASHIMA CHEMICAL CO LTD DAINIPPON INK AND CHEMICALS INC KASHIMA FACTORY 18 HIGASHI-FUKASIBA KAMISU-MACHI KASHIMA-GUN IBARAKI PREFECTURE 314-0193 JAPAN	56802
Etridiazole	CROMPTON SPECIALTIES PTY LTD	Arch Chemicals Inc. Performance Chemicals Division 100 McKee Road Rochester NY 14611 USA	44198
Etridiazole	CROMPTON SPECIALTIES PTY LTD	BAYER AG GESCHAFTSBEREICH ORGANISHE CHEMIKALIEN D-41538 DORMAGEN GERMANY	57792
Eugenol	PCT International Pty Ltd	Ungerer & Company 4 Bridgewater Lane Lincoln Park NJ07035 USA	53774
Extract of lemon eucalyptus, being acid modified oil of lemon eucalyptus (Corymbia citriodora)	MOSI-GUARD INTERNATIONAL LIMITED	MOSI-GUARD INTERNATIONAL LIMITED MOORFIELD RD YEADON LEEDS LS19 7BN UNITED KINGDOM	54942
Fenamiphos	Bayer CropScience Pty Ltd	BAYER CROPSCIENCE GMBH 42096 WUPPERTAL-ELBERFELD BAYERWERK GERMANY	44171
Fenamiphos	Bayer CropScience Pty Ltd	NIHON BAYER AGROCHEM K.K. HOFU FACTORY SHINDEN TSUKIJI 2061 HOFU-SHI YAMAGUCHI 747 JAPAN	51157

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Fenamiphos	4FARMERS PTY LTD	ZHEJIANG YIFAN AGRICULTURE CHEMICAL FACTORY NO. 2, ZONE 4, DEVELOPMENT ZONE, FUPING, WENZHOU, ZHEJIANG 325013 P.R. CHINA	55043
Fenamiphos	IMTRADE AGROSCIENCES PTY LTD	ZHEJIANG YIFIN CHEMICAL CO LTD NO 2 ZONE 4 FUPING DEVELOPMENT ZONE WENZHOU ZHEJIANG 325013 PEOPLES REPUBLIC OF CHIN	56591
Fenarimol	Du Pont (Australia) Limited	Eli Lilly Corporation Tippecanoe Laboratories Lilly Road Lafayette Indianapolis 47902 USA	44169
Fenarimol	Du Pont (Australia) Limited	Lonza A.G. Walliswer Werke CH-3930 VISP SWITZERLAND	48317
Fenbuconazole	DOW AGROSCIENCES AUSTRALIA LIMITED	DOW AGROSCIENCES LLC (USA) SUGAI CHEMICAL INDISUTRY CO LTD WAKAYAMA FACTORY 4-4-6 UZU WAKAYAMA CITY WAKAYAMA PREFECTURE JAPAN	54532
Fenbutatin oxide	BASF Australia Ltd	BASF S.A. Avenida Roberto Simonsen, No: 1500 Centrol Industrial CEP: 13140000 Paulinia Sao Paulo BRAZIL	50930
Fenbutatin oxide	BASF Australia Ltd	Acima Aktiengesellschaft fur Chemische Industries 9470 Buchs / SG SWITZERLAND	44589

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Fenbutatin oxide	BASF Australia Ltd	Nitto Kasei Company Ltd 17 - 14 Nishiawaji 3-Chome Higashiyodogawa-Ku Osaka JAPAN	44506
Fenhexamid	Bayer CropScience Pty Ltd	BAYER CROPSCIENCE AG BCS IOP A.I. MANUFACTURING ALTE HEERSTRASSE BUILDING A603 D-41538 DORMAGEN GERMANY	44462
Fenitrothion	Sumitomo Chemical Australia Pty Ltd	Sumitomo Chemical Company Limited Oita Works 2200 Tsurusaki Oita 870-01 JAPAN	44499
Fenoxaprop-P-ethyl	Bayer CropScience Pty Ltd	AVENTIS CROPSCIENCE GMBH INDUSTRIE PARK HOECHST BLD C540 D-65926 FRANKFURT AM MAIN GERMANY	44326
Fenoxycarb	Syngenta Crop Protection Pty Limited	Syngenta Agro S.A. Chevrin de la Loge F-31078 Toulouse Cedex FRANCE	44056
Fenpyroximate	Bayer CropScience Pty Ltd	Sugai Chemical Industry Co Wakayama-Nishi Factory 1280 Minato Wakayam-shi Wakyama JAPAN	46887

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Fenthion	Bayer CropScience Pty Ltd	BAYER CROPSCIENCE AG BCS IOP A.I. MANUFACTURING ALTE HEERSTRASSE BUILDING A603 D-41538 DORMAGEN GERMANY Or BAYER CROPSCIENCE INDIA LTD KOLSHET ROAD THANE 400607 MAHARASHTRA INDIA	44383
Fenvalerate	Sumitomo Chemical Australia Pty Ltd	Sumitomo Chemical Company Limited Oita Works 2200 Tsurasaki Oita 870-01 JAPAN	44034
Fenvalerate	Imtrade AgroSciences Pty Ltd	E.I.D. Parry (India) Ltd Plot 22 A TTC Industrial Area Thane-Belapur Road Ghansoli P.O. Navi Mumbai - 400 701 INDIA	53829
Fipronil	Bayer CropScience Pty Ltd	BAYER CROPSCIENCE SA ALL' CHEM SA RUE GLACERIE 03100 MONTLUCON FRANCE	46789
Fipronil	Bayer CropScience Pty Ltd	BASF AGRI-PRODUCTION SAS 32 RUE DE VERDUN 76410 SAINT AUBIN LES ELBEUF FRANCE	51985

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Fipronil	GHARDA AUSTRALIA PTY LTD	GHARDA CHEMICALS LIMITED D-1/2 MIDC, LOTE PARSHURAM PIN 415709 TAL KHED DIST. RATNAGIRI MAHARASHTRA INDIA	58418
Fipronil	BAYER CROPSCIENCE PTY LTD	BAYER CROPSCIENCE HANGZHOU CO LTD NO 5 ROAD HANGZHOU ECONOMIC & TECH DEV ZONE HANGZHOU 310018 PR CHINA	59286
Fipronil Manufacturing Concentrate	Bayer CropScience Pty Ltd	BAYER CROPSCIENCE SA ALL'CHEM SA RUE MARCEAU 03317 MONTLUCON FRANCE	49120
Fipronil Manufacturing Concentrate	Bayer CropScience Pty Ltd	BASF AGRI-PRODUCTION SAS 32 RUE DE VERDUN 76410 SAINT AUBIN LES ELBEUF FRANCE	52547
Flamprop-methyl	BASF Australia Ltd	Shell Netherland Chemie BV (Pernis) Vondelingenweg 601 3190 GB Hoogvliet-Rotterdam THE NETHERLANDS	44552
Flamprop-M-methyl	BASF Australia Ltd	Kemira Fine Chemicals Oy FIN 67101 Kokkola FINLAND	44317
Flamprop-M-methyl	BASF Australia Ltd	Shell Netherland Chemie BV Vondelingerweg 601 3190 GB Hoogvliet-Rotterdam THE NETHERLANDS	44354

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Flamprop-M-methyl	FARMOZ PTY LIMITED	CHEMTECH COMPANY LIMITED HEBEI WAN QUAN PESTICIDE FACTORY KONGJIAZHUANG WANQUAN HEBEI PROVINCE P.R. CHINA	56096
Flocoumafen	BASF Australia Ltd	Shell Research Ltd Sittingbourne Kent UNITED KINGDOM	44267
Flocoumafen	BASF Australia Ltd	Lipha Chimie Fine Division Orchimie 35 Rue-Saint-Romain F-69379 Lyon Cedex 08 FRANCE	49436
Fluazifop-P-butyl	Syngenta Crop Protection Pty Limited	Syngenta Agrochemicals Hudderfield Works Leeds Road Hudderfield HD 11FF UNITED KINGDOM	44001
Fluazinam	Crop Care Australasia Pty Ltd & ISK Oceania Pty Ltd	SNPE 12 Quai Henry IV 75181 Paris Cedex 04 FRANCE	45280
Fluazuron	Novartis Animal Health Australasia Pty Limited	Syngenta Crop Protection Munchwilen AG CH-4333 Munchwilen SWITZERLAND	54496
Fludioxonil	Syngenta Crop Protection Pty Limited	Syngenta Crop Protection Schwiezerhalle AG Werk Schweizerhalle Rheinfelderstrasse CH-4133 Pratteln SWITZERLAND	51425

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Flufenoxuron	BASF Australia Ltd	SNPE Establissment de Toulouse Chemin de la Loge 31078 Toulouse Cedex FRANCE	44582
Flumetsulam	Dow AgroSciences Australia Limited	Dow Agro Sciences LLC Chemdesign Corporation 99 Development Road Fitchburn 012420 USA	44319
Flumioxazin	SUMITOMO CHEMICAL AUSTRALIA PTY LIMITED	SUMITOMO CHEMICAL COMPANY LTD OITA WORKS 2200 TSURUSAKI OITA-CITY OITA 870-01 JAPAN	54434
Fluometuron	Makhteshim-Agan (Australia) Pty Ltd	Agan Chemical Manufacturers Ltd Northern Industrial Zone Ashdod 77102 ISRAEL	44146
Fluometuron	Makhteshim-Agan (Australia) Pty Limited	Syngenta Crop Protection Monthey AG Monthey Plant Usine de Monthey CH - 1870 Monthey SWITZERLAND	44395
Fluometuron	Syngenta Crop Protection Pty Limited	Rhone Poulenc Agrochimie Usine de Pont de Claix F - 38800 Le Pont de Claix FRANCE	48398
Fluometuron	Nufarm Australia Limited	Nufarm Pflanzenschutz GmbH & Co KG St Peter Strasse 25 Linz AUSTRIA	49242

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Fluometuron	Syngenta Crop Protection Pty Limited	I.Pi.Ci. S.p.A., Industria Prodotti Chemici Via Fratelli Beltrami, 11 20026 Novate Milanese ITALY	52268
Fluometuron	Farmoz Pty Ltd	EMV NORTH-HUNGARIAN CHEMICAL WORKS CO. LTD 3792 Sajobabony HUNGARY	52459
Fluometuron	I.Pi.Ci. (Aust) Pty Ltd	I.Pi.Ci. S.p.A. Via Fratelli Beltrami, 11 20026 Novate Milanese ITALY	52553
Fluometuron	Imtrade AgroSciences Pty Ltd	Wenzhou Zhenan Medicine Factory No. 26 Tutian Road Yangfushan Industry Zone Wenzhou Zhejiang 325003 PEOPLE'S REPUBLIC OF CHINA	54014
Fluometuron	AGROGILL CHEMICALS PTY LTD	EMV NORTH-HUNGARIAN CHEMICAL WORKS CO. LTD 3792 SAJOBABONY HUNGARY	56142
Flupropanate-sodium	SOGO SHOSHA (CHEMICALS) AUSTRALIA PTY LTD	Synica Chemicals 476 Zhenbei Road Shanghai 200062 P.R. CHINA	52517
Flupropanate-sodium	Vee Dri (Australia) Pty Limited	Fuxin Fluorine Company Limited Xihe District Fuxin Liaoning Province CHINA	52916

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Flupropanate-sodium	Tri-Delta Chemicals Pty Ltd	Som Phytopharma (India) Limited Plot No. 154/A5 Survey No. 172/U Sri Venkateswara Co-Op. Indl. Estate P.O.I.D.A. Bollaram – 502325 (Andhra Pradesh) INDIA	53213
Flupropanate-sodium	Farmoz Pty Limited	Choseright Limited C/- Guandong Panyu Shilou Fine Chemical Factory Lot 2, Jiao Tang Chemical Estate Shilou Town Guanzhou Guangdong PC511400 PEOPLE'S REPUBLIC OF CHINA	53930
Flupropanate-sodium Manufacturing Concentrate	Sumitomo Chemical Australia Pty Ltd	Daikin Industries Limited Yodogawa Works 1-1 Nishihitotsuya Settsu-shi Osaka JAPAN	44272
Fluquinconazole	Bayer CropScience Pty Ltd	BAYER CROPSCIENCE LIMITED HAUXTON CAMBRIDGE CB2 5HU ENGLAND UNITED KINGDOM Or BAYER CROPSCIENCE GMBH PSM1 - KNAPSACK D-50354 HUERTH GERMANY	44196
Fluroxypyr-meptyl	Mekhteshim-Agan (Australia) Pty Limited	Agan Chemical Manufacturers Limited Northern Industrial Zone ASHDOD 77102 ISRAEL	51621
Fluroxypyr-meptyl	Dow AgroSciences Australia Limited	DOW AGROSCIENCES S.A. ZONE INDUSTRIELLE 67410 DRUSENHEIM FRANCE	49139

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Fluroxypyr-meptyl	IMTRADE AGROSCIENCES PTY LTD	AIMCO PESTICIDES LTD AKHAND JYOTI BUILDING 8TH ROAD SANTA CRUZ (E) BOMBAY INDIA 400050	59004
Flusilazole	Du Pont (Australia) Ltd	E. I. du Pont de Nemours & Co., Inc La Porte Plant 12501 Strang Road La Porte Texas 77571 USA	44069
Flutolanil	Bayer CropScience Pty Ltd	Central Glass Co., Limited Ube Plant 5253, Okiube, Ube-shi Yamaguchi 755-0001 JAPAN	53220
Flutriafol	Cheminova Australia Pty Limited	Zeneca Fine Chemicals Manufacturing Organisation Grangemouth Works Earls Road Grangemouth Stiringshire FK3 8XG UNITED KINGDOM	44286
Flutriafol	Farmoz Pty Limited	Choseright Company Ltd Changzhou Nanjing Chemical Factory No. 1 Xun Xi South Road Changzhou District P.C. 213116 PEOPLE'S REPUBLIC OF CHINA	54154

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Flutriafol	4FARMERS PTY LTD	SEVENCONTINENT AGRICHEMICAL CO. LTD 28 CHENGBEI ROAD ZHANGJIAGANG JIANGSU 215600 PR CHINA	56861
Flutriafol	UNITED FARMERS COOPERATIVE COMPANY LTD	NINGBO YIHWEI CHEMICALS COMPANY LIMITED XIASHA ECONOMIC AND TECHNOLOGY DEVELOPMENT ZONE HANGZHOU ZHEJIANG PR CHINA	57782
Flutriafol	CONQUEST AGROCHEMICALS PTY LTD	KASMAC CHEMICAL INDUSTRY CO LTD GUA PU TOWN LUHE DISTRICT NANJING JIANGSU PR CHINA	57922
Flutriafol	TRI-DELTA CHEMICALS PTY LTD	TRUSTCHEM CO LTD 89 HANZHONG RD NANJING 210029 PEOPLES REPUBLIC OF CHINA	58194
Flutriafol	FARMOZ PTY LIMITED	CHOSERIGHT LIMITED JIANGSU SEVENCONTINENT GREEN CHEM CO LTD 28 CHENGBEI RD ZHANGJIANGANG 215600 JIANGSU PROVINCE PR CHINA	58284
Flutriafol	AGROGILL CHEMICALS PTY LTD	YANCHENG LIMIN CHEMICAL FACTORY NO 18 YANHUAI RD LONGGANG TOWN YANCHENG CITY JIANGSU PROVINCE 224011 PR CHINA	58319

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Fosetyl-aluminium	Bayer CropScience Pty Ltd	BAYER CROPSCIENCE SA TOLOCHIMIE SITE PONT DE CLAIX RUE LAVOISIER BP 36 38800 PONT DE CLAIX FRANCE	44020
Furalaxyl	Syngenta Crop Protection Pty Limited	Syngenta Grimsby Limited Pyewipe Grimsby NE Lincolnshire DN31 2SR UNITED KINGDOM	48334
Furalaxyl	Syngenta Crop Protection Pty Limited	Syngenta Crop Protection Schweizerhalle AG Werke Schweizerhalle Rothausstrasse 61 CH-4133 Pratteln 1 SWITZERLAND	51069
Furathiocarb	Syngenta Crop Protection Pty Limited	Mitsubishi Kasei Corporation 5-2 Marunouchi 2-chome Chiyoda-ku Tokyo 100 JAPAN	46052
Gamma-cyhalothrin	DOW AGROSCIENCES AUSTRALIA LIMITED	CHEMINOVA AGRO A/S THYBORONVEJ 76-78 DK-7673 HARBOORE DENMARK	56180
Gibberellic Acid	Valent BioSciences (A division of Sumitomo Chemical Australia Pty Ltd)	Abbott Laboratories Chemical & Agricultural Products Division 1401 Sheridan Road North Chicago Illinois 60064-4000 USA	44377

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Gibberellic Acid	Bloomfresh Pty Ltd	Krishi Rasayan (Bihar) Shed 2A, Large Industrial Estate RK Ashram, Muzzaffarpur Bihar INDIA	46378
Gibberellic Acid	Farmoz Pty Ltd	Choseright Limited Quickett Company Limited C\o Shanghai No: 18 Pharmaceutical Factory No 804 Bao San Road Shanghai PEOPLE'S REPUBLIC OF CHINA	44505
Gibberellic Acid	NUFARM AUSTRALIA LIMITED	Zhejiang Shenghua Biok Biology Co. Ltd Zongguan Industrial Area Deqing Zhejiang PEOPLE'S REPUBLIC OF CHINA	52731
Gibberellins A_4+A_7	Valent BioSciences (A division of Sumitomo Chemical Australia Pty Ltd)	Abbott Laboratories Chemical & Agricultural Products Division 1401 Sheridan Road North Chicago Illinois 60064-4000 USA	44376
Gibberellin A4 and Gibberellin A7	Farmoz Pty Limited	Choseright Limited C/o Shanghai No. 18 Pharmaceutical Factory No. 804 Bao San Road Shanghai 200081 PEOPLE'S REPUBLIC OF CHINA	52502
Gibberellin A4 and Gibberellin A7	Fine Agrochemicals Limited (C/o Kerwin Chambers Associates Pty Ltd)	Diaspa S.P.A. Strada Provinciale per Voghera 27050 Corona (PV) ITALY	53550
Glufosinate-ammonium Manufacturing Concentrate	Bayer CropScience Pty Ltd	BAYER CROPSCIENCE COMPANY 1740 WHITEHALL ROAD NORTH MUSKEGON MICHIGAN 79445 USA	51002

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Glufosinate-ammonium	Bayer CropScience Pty Ltd	AVENTIS CROPSCIENCE GMBH INDUSTRIE PARK HOECHST BLD C540 D-65926 FRANKFURT AM MAIN GERMANY	44357
Glufosinate-ammonium Manufacturing Concentrate	Bayer CropScience Pty Ltd	AVENTIS CROPSCIENCE GMBH INDUSTRIE PARK HOECHST BLD C540 D-65926 FRANKFURT AM MAIN GERMANY	44417
Glyphosate	Australian Merchant Holdings Pty Ltd	Zhenjiang Jian Nan Chemical Factory Xinhe Lutan Zhenjiang Jiang Su Province CHINA	47982
Glyphosate	Cheminova Australia Pty Limited	Cheminova Agro A/S Thyboronvej 76-78 DK-7673 Harboore DENMARK	44237
Glyphosate	Nufarm Australia Limited	Alkaloida Chemical Company Tiszavasvari Kabay Janos UT 29 H-444 HUNGARY	44279
Glyphosate	Nufarm Australia Limited	Davison Industries Pty Ltd Greenlands Road Pinjarra Western Australia 6208 AUSTRALIA	44391
Glyphosate	Farmoz Pty Ltd	Choseright Limited Gucheng Bridge Cangshi Highway Jinzhou County Hebei Province CHINA	44445
Glyphosate	Farmoz Pty Ltd	Jinzhou Seventh Chemical Factory Gucheng Bridge Cangshi Highway Jinzhou County Hebei Province CHINA	45770

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Glyphosate	Farmoz Pty Ltd	Choseright Limited C\o No 2 Jaio Tan Industrial Estate Chemical District Shilou Panju Guangdong Province CHINA	45787
Glyphosate	Kenso Corporation (M) SDN BHD	Hebei Golhil Chemicals Co Ltd Tong Da Highway Jinzhou City Hebei 052260 CHINA	49479
Glyphosate	Lief Petroleum Pty Ltd	Zhejiang Xinanjiang Chemical Industrial Group Co Ltd 93 Daqiao Road Xinanjiang Jiande District Zhejiang Province CHINA	47700
Glyphosate	Mastra Corporation Pty Ltd	Mastra Corporation SDN BHD Lot 6/Jalan 5, Kawasan Perusahaan Bandar Sultan Suleiman 42000 Port Klang MALAYSIA	46407
Glyphosate	Monsanto Australia Ltd	Monsanto Company USA Luling Plant Highway 90 Luling Louisiana 70070 USA	44040
Glyphosate	Monsanto Australia Ltd	Monsanto Company USA Fayetteville Plant Cedar Creek Road Fayetteville North Carolina 28301 USA	44041

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Glyphosate	Monsanto Australia Ltd	Monsanto Europe NV Scheldelaan B-2040 Antwerp BELIGUM	44042
Glyphosate	Monsanto Australia Ltd	Monsanto Australia Limited 61 Market Road Brooklyn Victoria 3012 AUSTRALIA	44140
Glyphosate	Nufarm Australia Limited	Nufarm Australia Limited 103 - 105 Pipe Road Laverton Victoria 3028 AUSTRALIA	44453
Glyphosate	Excel Industries (Australia) Pty Ltd	Excel Industries Ltd Roha, Village Dhatav District Raigad Maharashtra State INDIA	44295
Glyphosate	Rotam Australasia Pty Ltd	Rotam Limited C\o Tianjin Rotam Chemical Industry Co Ltd Tie Dong Road Beichen District, Tianjin CHINA	47329
Glyphosate	Sanonda (Australia) Pty Ltd	Hubei Sanonda Co.Ltd No 1 East Beijing Road Shashi City Hubei 434011 CHINA	45973
Glyphosate	HALLEY INTERNATIONAL ENTERPRISE (AUSTRALIA) PTY LTD	Zhejiang Xinanjiang Chemical Industrial Group Co Ltd 93 Daqiao Road Xinanjiang Jiande District Zhejiang Province CHINA	51373

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Glyphosate	Redox Chemicals Pty Ltd	Zhejiang Xinan Chemical Industrial Group Co Ltd 93 Daqiao Road Xinanjiang Jiande District Zhejiang Province PEOPLE'S REPUBLIC OF CHINA	51693
Glyphosate	HALLEY INTERNATIONAL ENTERPRISE (AUSTRALIA) PTY LTD	Excel Industries Limited Roha, Village Dhatav District Colaba Maharashtra State INDIA	51982
Glyphosate	Sabero Australia Pty Ltd	Sabero Organics Gujarat Limited Plot No 2102 GIDC Sarigram-396 155 District Bulsar Gujarat INDIA	52056
Glyphosate	RONIC INTERNATIONAL PTY LTD	Cinkor Corporation 4F No. 2-3 Wu Chuan Road Taichung TAIWAN REPUBLIC OF CHINA.	52487
Glyphosate	A & C Chemicals Pty Ltd	Zhenjiang Jian Nan Chemical Factory 6/F Huanqiu Building Nanmen Street Jiangsu Zhenjiang City Rutan Jiangsu Province CHINA	52507
Glyphosate	HALLEY INTERNATIONAL ENTERPRISE (AUSTRALIA) PTY LTD	Zhejiang Xinan Chemical Industrial Group Company Ltd No. 93 Daqiao Road Xinanjiang Jiande District Zhejiang Province CHINA	53227

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Glyphosate	HALLEY INTERNATIONAL ENTERPRISE (AUSTRALIA) PTY LTD	Qidong Weien Yinong Chemical Co Ltd Laogang Qidong City Jiangsu CHINA	52877
Glyphosate	SIPCAM PACIFIC AUSTRALIA PTY LTD	Zhenjiang Jian Nan Chemical Factory 6/F Huanqiu Building Nanmen Street Jiangsu Zhenjiang City Rutan Jiangsu Province PEOPLE'S REPUBLIC OF CHINA	53553
Glyphosate	KTcom Pte Ltd	Zhejiang Xinan Chemical Industrial Group Company Ltd No. 93 Daqiao Road Xinanjiang Jiande District Zhejiang Province PEOPLE'S REPUBLIC OF CHINA	53660
Glyphosate	Syngenta Crop Protection Pty Limited	Syngenta Crop Protection AG Huddersfield Manufacturing Centre Leeds Road Huddersfield HD 11FF UNITED KINGDOM	54583
Glyphosate	CAPITAL COMMODITIES (VIC) PTY. LTD	SINON CORPORATION NO 111, CHUNG SHAN RD TA-TU HSIANG TAICHUNG HSIEN 432 TAIWAN	54790
Glyphosate	SIPCAM PACIFIC AUSTRALIA PTY LTD	Qidong Weien Yinong Chemical Co. Ltd Laogang Qidong City Jiangsu PEOPLE'S REPUBLIC OF CHINA	55212

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Glyphosate	Sabero Australia Pty Ltd	Sabero Organics Gujarat Limited Plot No 2102 GIDC Sarigram 396 155 District Bulsar Gujarat INDIA	55257
Glyphosate	Monsanto Australia Limited	Monsanto Argentine SAIC Monsanto Plant Ruta 12Km 83, 100 2800 Zarate ARGENTINA	55368
Glyphosate	AGROGILL CHEMICALS PTY LTD	JINGMA CHEMICALS LIMITED ZHEJIANG LONGYOU GREENLAND PESTICIDES COMPANY LTD NO. 50 BAO TA RD, LONGYOU ZHEJIANG PR CHINA	55695
Glyphosate	MONSANTO AUSTRALIA LTD	MONSANTO DO BRASIL LTDA AV CARLOS MARCONDES 1200 12241-420 BAIRRO DO LIMOEIRO SAO JOSE DOS CAMPOS SP BRAZIL	56452
Glyphosate	4FARMERS PTY LTD	HEBEI GOLHIL CHEMICALS CO LTD TONG DA HIGHWAY JINZHOU CITY HEBEI 052260 P.R. CHINA	56472

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Glyphosate	PACIFIC AGRISCIENCE PTY LTD	QIDONG WEIEN YINONG CHEMICAL CO. LTD LAOGANG QIDONG CITY JIANGSU PR CHINA	56663
Glyphosate	PACIFIC AGRISCIENCE PTY LTD	ZHENJIANG JIAN NAN CHEMICAL FACTORY 6/F HUANQIU BUILDING NANMEN STREET JIANGSU ZHENJIANG CITY RUTAN JIANGSU PROVINCE PR CHINA	56664
Glyphosate	SINON AUSTRALIA PTY LIMITED	SINON CORPORATION NO 111, CHUNG SHAN RD TA-TU HSIANG TAICHUNG HSIEN 432 TAIWAN	58225
Glyphosate Manufacturing Concentrate	Cheminova Australia Pty Limited	Cheminova Agro A/S Thyboronvej 76-78 DK-7673 Harboore DENMARK	47698
Glyphosate-isopropylammonium Manufacturing Concentrate	Superway Garden Products Pty Ltd	Shen Nong Chemical Company Ltd 161 Ho Cheng Street Taichung City TAIWAN	46380
Glyphosate-isopropylammonium Manufacturing Concentrate	Triox Pty Ltd	Comlets Chemical Industral Co Ltd No 196, Sec. 1, Shinping Road Taiping Hsiang Taichung Hsien TAIWAN	49014
Glyphosate-isopropylammonium Manufacturing Concentrate	Kenso Corporation (M) SDN BHD	Kenso Corporation (M) SDN BHD Lot 6, 6.6 Miles, Jalan Kepong 52000 Kuala Lumpur MALAYSIA	49478

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Glyphosate-trimesium	Syngenta Crop Protection Pty Limited	Syngenta Inc Mt Pleasant Tennessee USA	44275
Glyphosate-trimesium Manufacturing Concentrate	Syngenta Crop Protection Pty Limited	Syngenta Agrochemicals Parc Industrial Tyberchamps 6198 Seneffe BELGIUM	48588
Guazatine acetates Manufacturing Concentrate	Makhteshim-Agan (Australia) Pty Limited	Aksonobel Surface Chemistry AB 85013 Sunsdsvall SWEDEN	44386
Guazatine acetates Manufacturing Concentrate	CORALBERRY HOLDINGS PTY LTD T/AS HYGROTECH OCEANIA	ICA LABORATORIES CC 28 PLANKEN STREET PLANKEN BRUG INDUSTRIAL STELLENBOSCH 7601 SOUTH AFRICA	54723
Halosulfuron-methyl	Nissan Chemical Industries Ltd	Nissan Chemical Industries Limited Onoda Plant 6903-1 Oaza Onoda Onoda, Yamaguchi Prefecture 756 JAPAN	46051
Halosulfuron-methyl	TRI-DELTA CHEMICALS PTY LTD	JIANGSU INSTITUTE OF ECOMONES 102 XIMEN STREET JINTAN JIANGSU 213200 PR CHINA	56704
Haloxyfop-P-methyl	Dow AgroSciences Australia Limited	Dow Agro Sciences S.A. Zone Industrielle 67410 Drusenheim FRANCE	44257

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Hexaconazole	Syngenta Crop Protection Pty Limited	Zeneca Fine Chemicals Manaufacturing Organisation Grangemouth Works Earls Road Grangemouth Stirlingshire FK3 8XG UNITED KINGDOM	44253
Hexaconazole	Colin Campbell (Chemicals) Pty Ltd	Rallis India Limited Plot No. 3301, G.I.D.C. Industrial Area Ankleshwar District Bharuch Gujurat - 393002 INDIA	52743
Hexaconazole	Gulmohar Pty Ltd	Sharda International Plot No. 169/1/A G.I.D.C. Naroda Phase I Ahmedabad Gujarat INDIA	53788
Hexaconazole	RALLIS INDIA LIMITED	RALLIS INDIA LIMITED PLOT NO. 3301 GIDC INDUSTRIAL AREA ANKLESHWAR DISTRICT BHARUCH GUJARAT INDIA	55928
Hexaconazole	IMTRADE AGROSCIENCES PTY LTD	TAGROS CHEMICALS INDIA LIMITED A 4/1, SIPCOT INDUSTRIAL COMPLEX PACHAYANKUPPAM CUDDALORE 607005 INDIA	56084
Hexaflumuron	Dow AgroSciences Australia Limited	Dow Agro Sciences LLC 2001 West Main Street Greenfield Indiana 46140-0708 USA	49342

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Hexazinone	Du Pont (Australia) Ltd	E. I. du Pont de Nemours & Co., Inc 5215 Kennedy Avenue East Chicago Indiana 46312 USA	44321
Hexazinone	Du Pont (Australia) Pty Ltd	E. I. du Pont de Nemours & Co., Inc La Porte Plant 12501 Strang Road La Porte Texas 77571 USA	48098
Hexazinone	GULMOHAR PTY LTD	KAJO AGROCHEMICAL CO LTD NO 2 QINGYANG ROAD QINGYANG JIANGYIN JIANGSU 214401 PR CHINA	52955
Hexazinone	4Farmers Pty Ltd	Jiangsu Xinyi Pesticide Limited No. 120 Xinan Road Xinyi Municipality Jiangsu Province 221400 PEOPLE'S REPUBLIC OF CHINA	53185
Hexazinone	Generex Australia Pty Ltd	Jiangsu Institute of Economes 102 Ximen Street Jintan Jiangsu 213200 PEOPLE'S REPUBLIC OF CHINA	51383
Hexazinone	Farmoz Pty Limited	Choseright Limited C/o Fivestar (Taicang) Fine Chemical Plant Changjiang Village Luhe Town Taicang City, Suzhou District Jiangsu Province, 215428 PEOPLE'S REPUBLIC OF CHINA	53028

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Hexazinone	Nufarm Australia Limited	Jiangsu Eternal Union Group Corporation Qingyang Town Jiangyin City Jiangsu Province 214401 PEOPLE'S REPUBLIC OF CHINA	54492
Hexythiazox	BASF Australia Ltd	Nippon Soda Co., Ltd Nihongi Plant Nakago-Mura Nakakubiki-Gun Niigata Prefecture 949-23 JAPAN	44083
Hydramethylnon	BASF Australia Ltd	Ruetgers Nease Corporation 3750 Clanton Road Augusta Georgia 30906 USA	44559
Hydramethylnon	BASF Australia Ltd	Cyanamid de Venezuela Apartado 5991 Caracas Venezuela SOUTH AMERICA	44261
Hydramethylnon	SIPCAM PACIFIC AUSTRALIA PTY LTD	AGROMEN CHEMICALS CO LTD WENZHOU ZHENAN MEDICINE FACTORY 26 TUTIAN RD YANGFUSHAN INDUSTRY ZONE WENZHOU ZHEJIANG 32503P PR CHINA	55872

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Hydramethylnon	PACIFIC AGRISCIENCE PTY LTD	AGROMEN CHEMICALS CO LTD WENZHOU ZHENAN MEDICINE FACTORY 26 TUTIAN RD YANGFUSHAN INDUSTRY ZONE WENZHOU ZHEJIANG 32503P PR CHINA	57908
Imazalil	Dow AgroSciences Australia Limited	Syntheta c/- Old Pretoria & George Road Halfway House REPUBLIC OF SOUTH AFRICA 1685	48405
Imazalil	Janssen-Cilag Pty Ltd	JANSSEN PHARMACEUTICA N.V. CHEMICAL PRODUCTION SITE JANSSEN PHARMACEUTICALAAN 3 B-2440 GEEL BELGIUM	44374
Imazalil	Makhteshim-Agan (Australia) Pty Ltd	Makhteshim Chemical Works Ltd New Industrial Estate Beer-Sheva 84100 ISRAEL	44284
Imazalil sulfate	Makhteshim-Agan (Australia) Pty Ltd	Makhteshim Chemical Works Ltd New Industrial Estate Beer-Sheva 84100 ISRAEL	44534
Imazamox	BASF Australia Ltd	BASF Corporatoin Hannibal Plant Route 168 and J.J. Spur Palmyra Missouri 63461 USA	51086
Imazamox	BASF Australia Ltd	BASF S.A. Rodovia Presidente Dutra KM 300.5 27500 Resende, R.J. BRAZIL	51085

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Imazapic	BASF Australia Ltd	BASF S.A. Rodovia Presidente Dutra km 300.5 27500 Resende R.J. BRAZIL	48036
Imazapyr	BASF Australia Ltd	BASF Corporation Hannibal Plant Route 168 & J.J. Spur South River Palmyra Missouri 63461 USA	44308
Imazethapyr	BASF Australia Ltd	BASF Corporation Hannibal Plant Route 168 & J.J. Spur South River Palmyra Missouri 63461 USA	44153
Imazethapyr	BASF Australia Ltd	BASF S.A. Rodovia Presidente Duta km 300.5 27500 Resende R.J. BRAZIL	44419
Imazethapyr	IMTRADE AGROSCIENCES PTY LTD	SHANGDONG JINGBO AGROCHEMICAL CO LTD ZHAIHAO BOXIN COUNTY SHANGDONG 256511 PEOPLES REPUBLIC OF CHINA	56083
Imidacloprid	Bayer CropScience Pty Ltd	BAYER CROPSCIENCE AG BCS IOP A.I. MANUFACTURING ALTE HEERSTRASSE BUILDING A603 D-41538 DORMAGEN GERMANY	49016

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Imidacloprid	Imtrade AgroSciences Pty Ltd	Wu Xian Agricultural Chemical Factory Mudu of Wuxian Suzhou Jiangsu 215 101 PEOPLE'S REPUBLIC OF CHINA	54193
Imidacloprid	FARMOZ PTY LIMITED	HEBEI WANQUAN PESTICIDE FACTORY KONGJIANZHUANG WANQUAN HEBEI PROVINCE PR CHINA	55951
Imidacloprid	AGROGILL CHEMICALS PTY LTD	JIANGSU CHANGLONG CHEMICALS CO., LTD LONGHU TANG NEW DISTRICT OF CHANGZHOU JIANGSU 213031 PR CHINA	56140
Imiprothrin Manufacturing Concentrate	Sumitomo Chemical Australia Pty Ltd	Sumitomo Chemical Company Limited Misawa Works Aza-Sabisirotai Misawa City, Aomori 033-01 JAPAN	50876
Indoxacarb Manufacturing Concentrate	DuPont (Australia) Ltd	DuPont Agricultural Products Mobile Manufacturing Centre Alabama 36505 USA	51669
Insulin-Like-Growth Factor-I (IGF-I)	PRIMEGRO PTY LTD	GROPEP LIMITED 28 DALGLEISH ST THEBARTON SA 5031 AUSTRALIA	55348
Iodosulfuron-methyl-sodium	Bayer CropScience Pty Ltd	Lonza AG CH-4002 Basel Munchensteiner Strabe 38 SWITZERLAND	52170

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Ioxynil	Makhteshim-Agan (Australia) Pty Ltd	Agan Chemical Manufacturers Ltd Northern Industrial Zone Ashdod 77102 ISRAEL	44413
Ioxynil octanoate	Makhteshim-Agan (Australia) Pty Ltd	Agan Chemical Manufacturers Ltd Northern Industrial Zone Ashdod 77102 ISRAEL	44414
Ioxynil octanoate	Bayer CropScience Pty Ltd	BAYER CROPSCIENCE LTD SWEETBRIAR ROAD NORWICH, NORFOLK NR6 5AP ENGLAND UNITED KINGDOM	44314
Iprodione	Bayer CropScience Pty Ltd	BASF AGRI-PRODUCTION SAS 32 RUE DE VERDUN 76410 SAINT AUBIN LES ELBEUF FRANCE	44465
Iprodione	Colin Campbell (Chemicals) Pty Ltd	Chimac Agriphar S.A. Rue de Renory, 26 B-4102 Ougree BELGIUM	53205
Iprodione	SINON AUSTRALIA PTY LIMITED	Cinkor Corporation 64F No 2-3 Wu Chuan Road Tiachung Taiwan REPUBLIC OF CHINA	53810
Iprodione	CONQUEST AGROCHEMICALS PTY LTD	KASMAC CHEMICAL INDUSTRY CO LTD 61 HUI QIAO RD WENZHOU ZIP ZHEJIANG PEOPLES REPUBLIC OF CHINA	56094

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Iprodione	SIPCAM PACIFIC AUSTRALIA PTY LTD	ZHEJIANG HEYI AGROCHEMICAL CO LTD HUANGYU INDUSTRIAL ZONE YONGJIA COUNTY ZHEJIANG PR CHINA	56705
Iprodione	FARMOZ PTY LIMITED	CHOSERIGHT LIMITED NANTONG KUAIDA CHEMICAL INDUSTRY CO., LTD NO. 2 JIANSHE ROAD MATANG TOWN, RUDONG COUNTY JIANGSU PROVINCE 226401 P.R. CHINA	56330
Isofenphos	Bayer CropScience Pty Ltd	BAYER CROPSCIENCE GMBH 42096 WUPPERTAL-ELBERFELD BAYERWERK GERMANY	44176
Isomate C	Biocontrol Ltd	Shin Etsu Chemical Company Ltd 28-1 Nishitukushima Kubiki-Mura Niihata-kan 942 JAPAN	45544
Isomate M	Biocontrol Ltd	Shin Etsu Chemical Company Ltd 28-1 Nishitushima, Kubiki-Mura Nakakubiki-gun Niihata-kan 942 JAPAN	44595
Isoxaben	Dow AgroSciences Australia Limited	Eli Lilly International Corporation Tippecanoe Laboratories Lilly Road Lafayette Indianapolis 47902 USA	47332

COMMON NAME	APPROVAL HOLDER	MANUFACTURER SITE	APPROVAL NO
Isoxaflutole	Bayer CropScience Pty Ltd	Kemira Fine Chemicals OY Kemirantie 67100 Kokkola FINLAND	49455
Isoxaflutole	Bayer CropScience Pty Ltd	BAYER CROPSCIENCE COMPANY ARKANSAS EASTMAN DIVISION EASTMAN CHEMICAL COMPANY BATESVILLE ARKANSAS 72503 USA	52256
Kresoxim-methyl	BASF Australia Ltd	BASF S.A. Rua Idrongal, 287 Bairro Eng. Neiva 12500-000 Guaratingueta – SP Brazil	51350
Kresoxim-methyl	BASF Australia Ltd	BASF Espanola S.A. Ctra. Nacional 340 km 1156 ES-43006 Tarragona SPAIN	52964
Kresoxim-methyl	Makhteshim-Agan (Australia) Pty Limited	Makhteshim Chemical Works Ltd New Industrial Estate Beer-Sheva 84100 ISRAEL	54364