

APPENDIX D. Pesticide Database

The following shows the information contained in the Pesticide Database used to extract the parameter values for 257 different types of pesticides for both, the AGNPS model and the WATFLOOD/Water Quality Component.

The indexing in the database is done through the type field and it refers to:

- H** - Herbicides
- I** - Insecticides
- F** - Fungicides
- N** - Nematicides
- P** - Plant Growth Regulators
- D** - Desiccants or Defoliants
- O** - Others

The columns or fields on the database file stand for the different parameter values according to:

Com_Name	Common pesticide name
SoilRes_H	Soil residue half-life (days)
Solub_W	Solubility in water (ppm)
OrgCar_K	Organic carbon sorption (K_{oc} - octanol partition coefficient)
FolW	Foliar washoff fraction (%)
FolR	Foliar residue half-live (days)

The source of information for the database is the AGNPS documentation and additional files that are distributed with the model. The conversion to the access file used by the interfaces was accomplished by direct import of the ASCII structure and DBIV files.

Table D1. Pesticide Database

Type	Com Name	SoilRes H	Solub W	OrgCar K	FolWash	FolRes Ha
N	1,3DICHLOROPROPENE (1)	10	100	100	0	0
N	1,3DICHLOROPROPENE (2)	24	500000	80	0	0
N	1,3DICHLOROPROPENE (3)	10	22	32	0	0
P	1NAPHTHALENEACETAMID	10	89	20	0	0
H	2,4,5-T	12	5	85	45	9
H	2,4,5T AMINE SALTS	24	500000	80	45	10
H	2,4-D AMINE	10	100	100	0	0
H	2,4D ACID	10	890	20	45	5
H	2,4D ESTERS OR OILSOL.	10	100	100	0	0
H	2,4DB BUTOXYETHYL	7	8	500	45	9
H	2,4DB DIMETHYLAMINE	10	709000	20	0	0
P	3CPA SODIUM SALT	10	200000	20	95	3
I	ACEPHATE	3	818000	2	70	2
H	ACIFLUORFEN SODIUM	14	250000	113	95	5
H	ALACHLOR	15	240	170	40	3
I	ALDICARB	40	6000	40	0	0
O	ALDICARB SULFOXIDE	40	6000	30	0	0
I	ALDOXYCARB (ALDICARB	20	10000	10	0	0
O	ALDRIN	28	0.1	160	5	2
H	AMETRYN	60	185	300	65	5
O	AMINOCARB	6	915	100	90	4
I	AMITRAZ	2	1	1000	45	1
H	AMITROLE	14	360000	100	95	5
P	ANCYMIDOL	120	650	120	50	30
F	ANILAZINE	1	8	3000	50	0
D	ARSENIC ACID	10000	17000	100000	95	10000
H	ASULAM SODIUM SALT	7	550000	40	95	3
H	ATRAZINE	60	33	100	45	5
I	AZINPHOSMETHYL	10	29	1000	65	2
O	BEC	600	0.1	55000	5	3
I	BENDIOCARB	5	40	570	85	3
H	BENEFIN (BENFLURALIN)	40	0.1	9000	20	10
F	BENOMYL	240	2	1900	25	6
H	BENSULFURON METHYL	5	120	310	0	0
H	BENSULIDE	120	5.6	1000	40	30
H	BENTAZON SODIUM SALT	20	2300000	34	60	2
O	BIFENOX	7	0.398	10000	40	3
I	BIFENTHRIN	26	0.1	240000	40	7
H	BROMACIL ACID	60	700	32	75	20
H	BROMOXYNIL BUTYRATE	7	0.08	10000	0	0
H	BUTYLATE	13	44	400	30	1
F	CAPTAN (1)	2.5	5.1	200	65	9
F	CAPTAN (2)	10	4	198	65	9
I	CARBARYL	10	120	300	55	7
I	CARBOFURAN	50	351	22	0	0
O	CARBOPHENOTHION	15	0.6	12500	65	6
F	CARBOXIN	7	195	260	0	0
H	CHLORAMBEN SALTS	14	900000	15	95	7
O	CHLORDANE	100	0.1	100000	5	2
I	CHLORDIMEFORM	60	500000	100000	90	1
H	CHLORIMURON ETHYL	40	1200	110	90	15
O	CHLOROBENZILATE	20	13	2000	5	10
F	CHLORONEB	130	8	1650	50	30
F	CHLOROPICRIN	1	2270	62	0	0
F	CHLOROTHALONIL	30	0.6	1380	50	10
O	CHLOROXURON	60	2.5	3000	40	15
H	CHLORPROPHAM (CIPC)	30	89	400	90	8
I	CHLORPYRIFOS	30	0.4	6070	65	3

Type	Com Name	SoilRes H	Solub W	OrgCar K	FolWash	FolRes Ha
H	CHLORSULFURON	160	7000	40	75	30
H	CLOMAZONE	24	1100	300	80	3
H	CLOPYRALID AMINE SALT	30	300000	6	95	2
H	CYANAZINE	14	170	190	60	5
H	CYCLOATE	30	95	430	50	2
I	CYFLUTHRIN	30	0.002	100000	40	5
I	CYPERMETHRIN	30	0.004	100000	0	0
I	CYROMAZINE	150	136000	200	0	0
O	DALAPON	30	1000	4	95	37
H	DALAPON SODIUM SALT	30	900000	1	95	37
N	DBCP	180	1000	70	0	0
F	DCNA (DICLORAN)	10	7	1000	50	4
H	DCPA	100	0.5	5000	30	10
O	DDT	120	0.1	240000	5	4
H	DESMEDIPHAM	30	8	1500	70	5
I	DIAZINON	40	60	1000	90	4
H	DICAMBA SALT	14	400000	2	65	9
H	DICHOLOBENIL	60	21.2	400	45	5
H	DICLOFOPMETHYL	37	0.8	16000	45	8
I	DICOFOL	60	1	180000	5	4
I	DICROTOPHOS	28	1000000	75	70	20
O	DIELDRIN	1400	0.1	50000	5	5
H	DIETHATYLETHYL	21	105	1400	40	10
H	DIFENZOUAT	100	817000	54500	95	30
I	DIFLUBENZURON	10	0.08	10000	5	27
P	DIMETHIPIN	10	3000	10	80	3
I	DIMETHOATE	7	39800	20	95	3
O	DINITRO	23	50	490	0	0
I	DINOCAP	20	4	550	30	8
H	DINOSEB PHENOL	20	50	500	60	3
H	DIPHENAMID	30	260	210	80	5
H	DIPROPETRYN	30	16	900	40	5
H	DIQUAT DIBROMIDE SALT	1000	718000	1000000	95	30
I	DISULFOTON	30	25	600	50	3
H	DIURON	90	42	480	45	30
F	DNOC SODIUM SALT	20	100000	20	95	8
F	DODINE ACETATE	20	700	100000	50	10
I	ENDOSULFAN	50	0.32	12400	5	3
H	ENDOTHALL (ENDOTHAL)	7	100000	20	90	7
O	EPN	5	0.5	13000	60	5
H	EPTC	6	344	200	75	3
I	ESFENVALERATE	35	0.002	5300	40	8
H	ETHALFLURALIN	60	0.3	4000	40	4
P	ETHEPHON	10	1239000	100000	95	5
I	ETHION	150	1.1	10000	65	7
H	ETHOFUMESATE	30	50	340	65	10
I	ETHOPROP (ETHOPROPHOS)	25	750	70	0	0
F	ETRIDIAZOLE	20	50	1000	60	3
H	FENAC (CHLORFENAC)	180	500000	20	95	30
I	FENAMIPHOS	50	400	100	0	0
O	FENAMIPHOS SULFOXIDE	42	400	40	0	0
F	FENARIMOL	360	14	600	40	30
I	FENBUTATIN OXIDE	90	0.013	2300	20	30
O	FENITRITHION	8	30	2000	90	3
H	FENOXAPROPETHYL	9	0.8	9490	20	5
I	FENOXYCARB	1	6	1000	0	0
O	FENSULFOTHION	24	1500	10000	90	3
O	FENTHION	34	4.2	1500	65	2
I	FENVALERATE	35	0.002	5300	25	10
F	FERBAM	17	120	300	90	3

Type	Com Name	SoilRes H	Solub W	OrgCar K	FolWash	FolRes Ha
H	FLUAZIFOPPBUTYL	15	2	5700	40	4
I	FLUCYTHRINATE	21	0.06	100000	40	5
P	FLUMETRALIN	20	0.1	10000	40	7
H	FLUOMETURON	85	110	100	50	30
H	FLURIDONE	21	10	1000	0	0
I	FLUVALINATE	30	0.005	1000000	40	7
H	FOMESAFEN SODIUM SALT	100	700000	60	95	30
I	FONOFOS	40	16.9	870	60	2
I	FORMETANATE	100	500000	1000000	95	30
H	FOSAMINE AMMONIUM	8	1790000	150	95	4
F	FOSETYLALUMINUM	0.1	120000	20	95	0
H	GLUFOSINATEAMMONIUM	7	1370000	100	95	4
H	GLYPHOSATE	47	900000	24000	60	2
H	HEXAZINONE	90	3300	54	90	30
I	HEXYTHIAZOX	30	0.5	6200	40	5
I	HYDRAMETHYLNON	10	0.006	730000	0	0
H	IMAZAMETHABENZMETHYL	35	1370	66	65	18
H	IMAZAPYR ACID	90	11000	100	90	30
H	IMAZAQUIN AMMONIUM	60	160000	20	95	20
O	IMAZETHAPYR (AC 263. 499)	90	200000	10	0	0
F	IPRODIONE	14	13.9	700	40	5
I	ISAZOFOS	34	69	100	65	5
I	ISOFPNPHOS	150	24	600	65	30
H	ISOPROPALIN	100	0.1	10000	0	0
H	LACTOFEN	3	0.1	100000	20	2
O	LAMBDA CYHALOTHRIN	30	0.005	180000	40	5
I	LINDANE	400	7	1100	5	2
H	LINURON	60	75	400	60	15
I	MALATHION (1)	1	130	1800	90	3
I	MALATHION (2)	25	145	1800	90	3
P	MALEIC HYDRAZIDE	30	400000	20	95	10
F	MANCOZEB	70	6	2000	25	10
H	MCPA DIMETHYLAMINE	25	866000	20	95	7
H	MCPA ESTER	25	5	1000	50	8
H	MCPB SODIUM SALT	14	200000	20	95	7
H	MECOPROP (MCPP) AMINE	21	660000	20	95	10
P	MEPIQUAT CHLORIDE SALT	1000	1000000	1000000	95	30
F	METALAXYL	70	8400	50	70	30
O	METALDEHYDE	10	230	240	0	0
F	METHAM (METAM) SODIUM	7	963000	10	0	0
I	METHAMIDOPHOS	6	1000000	5	95	4
H	METHANEARSONIC ACID	1000	1400000	100000	95	30
H	METHAZOLE	14	1.5	3000	40	5
I	METHIDATHION	7	220	400	90	3
I	METHIOCARB	30	24	300	70	10
I	METHOMYL	30	58000	72	55	0
I	METHOXYCHLOR	120	0.1	80000	5	6
O	METHYL BROMIDE	55	13400	22	0	0
I	METHYL PARATHION (1)	5	60	14000	65	3
I	METHYL PARATHION (2)	5	60	5100	65	3
F	METIRAM	20	0.1	500000	40	7
H	METOLACHLOR	90	530	200	60	5
H	METRIBUZIN	40	1220	60	80	5
H	METSULFURONMETHYL	120	9500	35	80	30
I	MEVINPHOS	3	600000	44	95	0
H	MOLINATE	21	970	190	0	0
I	MONOCROTOPHOS	30	1000000	1	95	2
P	NAA ETHYL ESTER	10	105	300	40	5
P	NAA SODIUM SALT	10	419000	20	0	0
I	NALED	1	2000	180	90	0

Type	Com Name	SoilRes H	Solub W	OrgCar K	FolWash	FolRes Ha
H	NAPROPAMIDE	70	74	400	60	15
O	NAPTALAM	12	200	30	0	0
H	NAPTALAM SODIUM SALT	14	231000	20	95	7
O	NITRAPYRIN	10	40	570	0	0
H	NORFLURAZON	90	28	600	50	15
H	ORYZALIN	20	2.5	600	40	5
H	OXADIAZON	60	0.7	3200	50	20
I	OXAMYL	4	282000	25	95	4
F	OXYCARBOXIN	20	1000	95	70	10
I	OXYDEMETONMETHYL	10	1000000	10	95	3
H	OXYFLUORFEN	35	0.1	100000	40	8
I	OXYTHIOQUINOX	30	1	2300	50	10
O	PARAOUAT	99	500000	10000000	40	3
H	PARAOUAT DICHLORIDE	1000	620000	1000000	60	30
I	PARATHION (ETHYL	14	24	5000	70	4
F	PCNB	21	0.44	5000	40	4
H	PEBULATE	14	100	430	70	4
H	PENDIMETHALIN	90	0.275	5000	40	30
I	PERMETHRIN	30	0.006	100000	30	8
H	PETROLEUM OIL	10	100	1000	50	2
H	PHENMEDIPHAM	30	4.7	2400	70	5
O	PHENTHOATE	40	200	250	65	2
I	PHORATE	60	22	1000	60	2
I	PHOSALONE	21	3	1800	65	8
I	PHOSMET	19	20	820	90	3
I	PHOSPHAMIDON	17	1000000	7	95	5
H	PICLORAM SALT	90	200000	16	60	8
F	PIPERALIN	30	20	5000	60	10
I	PIRIMIPHOSMETHYL	10	9	1000	0	0
F	PROCHLORAZ	120	34	500	50	30
I	PROFENOFOS	8	28	2000	90	3
O	PROFLURALIN	140	0.1	2	35	1
H	PROMETON	500	720	150	75	30
H	PROMETRYN	60	33	400	50	10
H	PRONAMIDE	60	15	200	30	20
H	PROPACHLOR	6.3	613	80	40	3
F	PROPAMOCARB	30	1000000	1000000	95	15
H	PROPANIL	1	200	149	70	1
I	PROPARGITE (1)	56	0.5	4000	20	5
I	PROPARGITE (2)	135	8.6	154	20	5
H	PROPAZINE	10	250	200	45	5
H	PROPHAM (IPC)	110	110	1000	50	2
F	PROPICONAZOLE	110	110	1000	70	30
I	PROPOXUR	30	1800	30	0	0
H	PYRAZON (CHLORIDAZON)	21	400	120	85	5
H	QUIZALOFOP ETHYL	60	0.31	510	20	15
H	SETHOXYDIM	5	4390	100	70	3
H	SIDURON	90	18	420	70	30
O	SILVEX	20	2.5	2600	40	5
H	SIMAZINE	60	6.2	130	40	5
H	SULFOMETURON METHYL	20	70	78	65	10
I	SULPROFOS	140	0.31	12000	55	0
H	TEBUTHIURON	360	2500	80	90	30
I	TEMEPHOS	30	0.001	100000	65	5
H	TERBACIL	120	710	55	70	30
I	TERBUFOS	5	5	500	60	2
H	TERBUTRYN	42	22	2000	50	5
F	THIABENDAZOLE	403	50	2500	60	30
D	THIDIAZURON	10	20	110	40	3
O	THIFENSULFURONMETHYL	12	2400	45	80	3

Type	Com Name	SoilRes H	Solub W	OrgCar K	FolWash	FolRes Ha
H	THIOBENCARB	21	28	900	70	7
I	THIODICARB	7	19.1	350	70	4
F	THIOPHANATE METHYL	10	3.5	1830	40	5
F	THIRAM	15	30	670	50	8
I	TOXAPHENE (1)	500	0.4	400000	5	2
I	TOXAPHENE (2)	9	3	100000	5	2
I	TRALOMETHRIN	27	0.001	100000	40	1
F	TRIADIMEFON	26	71.5	300	30	8
H	TRIALATE	82	4	2400	40	15
D	TRIBUFOS	30	2.3	5000	25	7
I	TRICHLORFON	10	120000	10	95	3
H	TRICLOPYR AMINE SALT	46	2100000	20	95	15
H	TRICLOPYR ESTER	46	23	780	70	15
H	TRIDIPHANE	28	1.8	5600	40	8
H	TRIFLURALIN	60	0.3	8000	40	3
F	TRIFORINE	21	30	540	80	5
I	TRIMETHACARB	20	58	400	0	0
F	TRIPHENYL TIN HYDROXIDE	75	1	23000	40	18
H	VERNOLATE	12	108	260	80	2