

Appendix H. Accepted ECOTOX Data Table (sorted by effect) and Bibliography

Table H-1. Freshwater fish data from ECOTOX. Data are arranged in alphabetical order by Effect Group. The code list for ECOTOX can be found at: <http://cfpub.epa.gov/ecotox/blackbox/help/codelist.pdf>.

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan II	Hyphessobrycon bifasciatus, Yellow tetra	ACC	ACC	GACC	BCF		21	d	0.0001		mg/L	100	7009
Endosulfan	Hyphessobrycon bifasciatus, Yellow tetra	ACC	ACC	GACC	BCF		21	d	0.0003		mg/L	100	7009
Endosulfan I	Hyphessobrycon bifasciatus, Yellow tetra	ACC	ACC	GACC	BCF		21	d	0.0002		mg/L	100	7009
Endosulfan	Hyphessobrycon bifasciatus, Yellow tetra	ACC	ACC	GACC	BCF		21	d	0.0002		mg/L	100	8035
Endosulfan	Hyphessobrycon bifasciatus, Yellow tetra	ACC	ACC	GACC	BCF		21	d	0.0003		mg/L	100	8035
Endosulfan	Hyphessobrycon bifasciatus, Yellow tetra	ACC	ACC	GACC	BCF		21	d	0.0001		mg/L	100	8035
Endosulfan I	Salmo salar, Atlantic salmon	ACC	ACC	GACC	BAF		92	d	0.724		ppm	100	104113
Endosulfan II	Salmo salar, Atlantic salmon	ACC	ACC	GACC	BAF		92	d	0.315		ppm	100	104113
Endosulfan I	Salmo salar, Atlantic salmon	ACC	ACC	RSDE	NOAEL		49	d	0.03		ppm	99.8	104340
Endosulfan	Channa punctata, Snake-head catfish	BCM	ENZ	GSTR	LOEC		1	d	0.005		mg/L	100	81028
Endosulfan	Channa punctata, Snake-head catfish	BCM	BCM	PCAR	LOEC		1	d	0.005		mg/L	100	81028
Endosulfan	Channa punctata, Snake-head catfish	BCM	ENZ	GSTR	LOEC		1	d	0.005		mg/L	100	81028
Endosulfan	Channa punctata, Snake-head catfish	BCM	ENZ	CTLS	LOEC		1	d	0.005		mg/L	100	81028
Endosulfan	Channa punctata, Snake-head catfish	BCM	BCM	GLTH	LOEC		1	d	0.005		mg/L	100	81028
Endosulfan	Channa punctata, Snake-head catfish	BCM	ENZ	GLRE	LOEC		1	d	0.005		mg/L	100	81028

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Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Channa punctata, Snake-head catfish	BCM	ENZ	GSTR	LOEC		1	d	0.005		mg/L	100	81028
Endosulfan	Channa punctata, Snake-head catfish	BCM	ENZ	CTLS	LOEC		1	d	0.005		mg/L	100	81028
Endosulfan	Channa punctata, Snake-head catfish	BCM	BCM	GLTH	LOEC		1	d	0.005		mg/L	100	81028
Endosulfan	Channa punctata, Snake-head catfish	BCM	ENZ	GLPX	LOEC		1	d	0.005		mg/L	100	81028
Endosulfan	Channa punctata, Snake-head catfish	BCM	ENZ	GLRE	LOEC		1	d	0.005		mg/L	100	81028
Endosulfan	Channa punctata, Snake-head catfish	BCM	BCM	TBAR	LOEC		1	d	0.005		mg/L	100	81028
Endosulfan	Channa punctata, Snake-head catfish	BCM	BCM	GLTH	LOEC		1	d	0.005		mg/L	100	81028
Endosulfan	Channa punctata, Snake-head catfish	BCM	ENZ	GLPX	LOEC		1	d	0.005		mg/L	100	81028
Endosulfan	Channa punctata, Snake-head catfish	BCM	ENZ	CTLS	LOEC		1	d	0.005		mg/L	100	81028
Endosulfan	Channa punctata, Snake-head catfish	BCM	BCM	TBAR	LOEC		1	d	0.005		mg/L	100	81028
Endosulfan	Channa punctata, Snake-head catfish	BCM	ENZ	GLRE	LOEC		1	d	0.005		mg/L	100	81028
Endosulfan	Channa punctata, Snake-head catfish	BCM	ENZ	GLPX	LOEC		1	d	0.005		mg/L	100	81028
Endosulfan	Channa punctata, Snake-head catfish	BCM	BCM	PCAR	LOEC		1	d	0.005		mg/L	100	81028
Endosulfan	Channa punctata, Snake-head catfish	BCM	BCM	TBAR	LOEC		1	d	0.005		mg/L	100	81028
Endosulfan	Channa punctata, Snake-head catfish	BCM	BCM	PCAR	LOEC		1	d	0.005		mg/L	100	81028
Endosulfan	Channa punctata, Snake-head catfish	BCM	ENZ	CTLS	LOAEL		1	d	0.005		mg/L	100	61957
Endosulfan	Channa punctata, Snake-head catfish	BCM	BCM	GLTH	LOAEL		1	d	0.005		mg/L	100	61957

Table H-1. Freshwater Fish Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Channa punctata, Snake-head catfish	BCM	BCM	PCAR	LOAEL		2	d	0.005		mg/L	100	104744
Endosulfan	Clarias batrachus, Walking catfish	BCM	ENZ	LADH	LOAEL		7	d	2.45		nM	100	103369
Endosulfan	Clarias batrachus, Walking catfish	BCM	BCM	PRCO	NOAEL		7	d	2.45		nM	100	103369
Endosulfan	Clarias batrachus, Walking catfish	BCM	ENZ	MLDA	LOAEL		7	d	2.45		nM	100	72552
Endosulfan	Clarias batrachus, Walking catfish	BCM	BCM	PRCO	NOAEL		7	d	2.45		nM	100	72552
Endosulfan	Clarias batrachus, Walking catfish	BCM	ENZ	ACHE	LOAEL		120	d	0.00072		mg/L	100	89006
Endosulfan	Cyprinus carpio, common carp	BCM	BCM	PRCO	LOAEL		4	d	0.005		mg/L	97	71889
Endosulfan	Cyprinus carpio, common carp	BCM	ENZ	GOTR	LOAEL		30	d	0.005		mg/L	97	71889
Endosulfan	Heteropneustes fossilis, Indian catfish	BCM	BCM	GLUC	LOAEL		7	d	0.04		mg/L	100	103229
Endosulfan	Heteropneustes fossilis, Indian catfish	BCM	BCM	GLUC	LOAEL		15	d	0.04		mg/L	100	103229
Endosulfan	Heteropneustes fossilis, Indian catfish	BCM	BCM	GLUC	LOAEL		30	d	0.04		mg/L	100	103229
Endosulfan	Heteropneustes fossilis, Indian catfish	BCM	BCM	GLUC	LOAEL		7	d	0.04		mg/L	100	103229
Endosulfan	Heteropneustes fossilis, Indian catfish	BCM	BCM	GLUC	NOAEL		15	d	0.04		mg/L	100	103229
Endosulfan	Heteropneustes fossilis, Indian catfish	BCM	BCM	GLUC	LOAEL		30	d	0.04		mg/L	100	103229
Endosulfan	Heteropneustes fossilis, Indian catfish	BCM	BCM	PHST	LOAEL		31	d	0.002		mg/L	100	103239
Endosulfan	Heteropneustes fossilis, Indian catfish	BCM	BCM	PHST	LOAEL		31	d	0.002		mg/L	100	103239
Endosulfan	Heteropneustes fossilis, Indian catfish	BCM	BCM	PHSC	LOAEL		31	d	0.002		mg/L	100	103239

Table H-1. Freshwater Fish Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Heteropneustes fossilis, Indian catfish	BCM	BCM	PHSI	LOAEL		31	d	0.002		mg/L	100	103239
Endosulfan	Heteropneustes fossilis, Indian catfish	BCM	BCM	PHSI	LOAEL		31	d	0.002		mg/L	100	103239
Endosulfan	Heteropneustes fossilis, Indian catfish	BCM	BCM	PHST	LOAEL		30	d	0.002		mg/L	100	103205
Endosulfan	Heteropneustes fossilis, Indian catfish	BCM	BCM	PHSS	LOAEL		30	d	0.002		mg/L	100	103205
Endosulfan	Heteropneustes fossilis, Indian catfish	BCM	BCM	PHST	LOAEL		30	d	0.002		mg/L	100	103205
Endosulfan	Heteropneustes fossilis, Indian catfish	BCM	BCM	PHSI	LOAEL		30	d	0.002		mg/L	100	103205
Endosulfan	Heteropneustes fossilis, Indian catfish	BCM	BCM	PHST	LOAEL		30	d	0.002		mg/L	100	103205
Endosulfan	Heteropneustes fossilis, Indian catfish	BCM	BCM	GLYC	LOAEL		60	d	0.0001313		mg/L	35	66390
Endosulfan	Jenynsia multidentata, Onesided Livebearer	BCM	ENZ	GSTR	LOAEL		1	d	0.000014		mg/L	100	103366
Endosulfan	Labeo rohita, Rohu	BCM	ENZ	NCCR	LOAEL		15	d	0.00025		mg/L	100	103203
Endosulfan	Lepomis macrochirus, Bluegill	BCM	ENZ	ACHE	LOAEL		2	d	0.001		mg/L	98	73011
Endosulfan	Lepomis macrochirus, Bluegill	BCM	BCM	PRCO	LOAEL		1	d	0.001		mg/L	98	73011
Endosulfan	Melanotaenia fluviatilis, Crimson-spotted rainbowfish	BCM	BCM	VITE	LOAEL		0.17	d	0.001		mg/L	100	103200
Endosulfan	Monopterus albus, Swamp or White Ricefield Eel	BCM	BCM	PRCO	LOAEL		4	d	<=0.001		mg/L	33	100663
Endosulfan	Mystus vittatus, Striped catfish	BCM	ENZ	ALPH	LOAEL		30	d	1.575E-05		mg/L	35	104028
Endosulfan	Salmo salar, Atlantic salmon	BCM	ENZ	EROD	LOAEL		35	d	0.71		ppm	99.8	104340
Endosulfan I	Salmo salar, Atlantic salmon	BCM	ENZ	GSTR	NOAEL		35	d	0.03		ppm	99.8	104340

Table H-1. Freshwater Fish Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan II	Salmo salar, Atlantic salmon	BCM	ENZ	GSTR	NOAEL		35	d	0.018		ppm	99.8	104340
Endosulfan	Salmo salar, Atlantic salmon	BCM	ENZ	GSTR	NOAEL		35	d	0.71		ppm	99.8	104340
Endosulfan	Tilapia nilotica, Nile tilapia	BCM	ENZ	EROD	NOAEL		21	d	1		ppm	95	103222
Endosulfan	Tilapia nilotica, Nile tilapia	BCM	HRM	THYR	NOAEL		21	d	1		ppm	95	103222
Endosulfan	Tilapia nilotica, Nile tilapia	BCM	HRM	THYR	NOAEL	LOAEL	35	d	0.001	0.1	ppm	95	103222
Endosulfan	Tilapia nilotica, Nile tilapia	BCM	BCM	HMGL	NOAEL		4	d	0.00245		mg/L	35	103202
Endosulfan	Tilapia nilotica, Nile tilapia	BCM	HRM	THYR	NOAEL		35	d	0.5		ppm	~95	87236
Endosulfan	Tilapia nilotica, Nile tilapia	BCM	ENZ	GENZ	LOAEL		35	d	0.1		ppm	~95	87236
Endosulfan	Bidyanus bidyanus, Silver perch	BEH	BEH	THML	LOAEL		12	d	0.0003		mg/L	100	93501
Endosulfan	Hypseleotris klunzingeri, Western Carp Gudgeon	BEH	BEH	THML	LOAEL		10	d	0.0008		mg/L	100	93501
Endosulfan	Melanotaenia duboulayi, Eastern rainbow fish	BEH	BEH	THML	LOAEL		10	d	0.001		mg/L	100	93501
Endosulfan	Mystus vittatus, Striped catfish	BEH	FDB	FCNS	LOAEL		21	d	0.02926		mg/L	35	88262
Endosulfan	Oncorhynchus mykiss, Rainbow trout, donaldson trout	BEH	BEH	THML	LOAEL		10	d	0.0005		mg/L	100	93501
Endosulfan	Oryzias latipes, Medaka, high-eyes	BEH	BEH	MIGR	LOAEL		21	d	0.00006		mg/L	100	89788
Endosulfan	Oryzias latipes, Medaka, high-eyes	BEH	FDB	FCNS	NOAEL		21	d	0.00006		mg/L	100	89788
Endosulfan	Oryzias latipes, Medaka, high-eyes	BEH	BEH	LOCO	NOAEL		7	d	0.001		mg/L	50	69838
Endosulfan	Oryzias latipes, Medaka, high-eyes	BEH	FDB	FCNS	NOAEL		2	wph	0.001		mg/L	50	69838

Table H-1. Freshwater Fish Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Oryzias latipes, Medaka, high-eyes	BEH	FDB	FCNS	NOAEL		2	wph	0.001		mg/L	50	69838
Endosulfan	Oryzias latipes, Medaka, high-eyes	BEH	BEH	LOCO	NOAEL		2	wph	0.001		mg/L	50	69838
Endosulfan	Channa punctata, Snake-head catfish	CEL	GEN	DAMG	LOAEL		4	d	0.004		mg/L	35	95817
Endosulfan	Cyprinus carpio, common carp	CEL	GEN	MEIA	LOAEL		1.5	d	0.00001		mg/L	100	91099
Endosulfan	Cyprinus carpio, common carp	CEL	CEL	LEUK	LOAEL		14	d	0.005		mg/L	97	71889
Endosulfan	Heteropneustes fossilis, Indian catfish	CEL	HIS	BODS	LOAEL		15	d	0.0112		mg/L	100	89150
Endosulfan	Labeo rohita, Rohu	CEL	GEN	MNUC	LOAEL		1.25	d	0.1		%	100	89312
Endosulfan	Lepomis macrochirus, Bluegill	CEL	CEL	DMTR	LOAEL		1	d	0.001		mg/L	100	96319
Endosulfan	Monopterus albus, Swamp or White Ricefield Eel	CEL	CEL	RBCE	LOAEL		4	d	<=0.001		mg/L	33	100663
Endosulfan	Mystus vittatus, Striped catfish	CEL	GEN	DAMG	LOAEL		1	d	0.0002		mg/L	35	104114
Endosulfan	Oncorhynchus mykiss, Rainbow trout,donaldson trout	CEL	CEL	CCHG	LOEC		28	d	0.000001		mg/L	100	19059
Endosulfan	Oncorhynchus mykiss, Rainbow trout,donaldson trout	CEL	CEL	CCHG	NOEC		28	d	0.0000001		mg/L	100	19059
Endosulfan	Tandanus tandanus, Catfish	CEL	CEL	PKNS	LOAEL		1	d	0.000995		mg/L	100	81795
Endosulfan	Tilapia nilotica, Nile tilapia	CEL	CEL	NCEL	LOAEL		4	d	0.0014		mg/L	35	103202
Endosulfan	Gambusia affinis, Western mosquitofish	GRO	MPH	LGTH	NOAEL		35	d	0.0009 TO 0.001881			99	103218
Endosulfan	Gambusia affinis, Western mosquitofish	GRO	MPH	SIZE	LOAEL		35	d	0.0009 TO 0.001881			99	103218
Endosulfan	Heteropneustes fossilis, Indian catfish	GRO	MPH	SMIX	NOAEL		31	d	0.002		mg/L	100	103239

Table H-1. Freshwater Fish Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Heteropneustes fossilis, Indian catfish	GRO	MPH	SMIX	LOAEL		31	d	0.002		mg/L	100	103239
Endosulfan	Heteropneustes fossilis, Indian catfish	GRO	MPH	SMIX	LOAEL		31	d	0.002		mg/L	100	103239
Endosulfan	Heteropneustes fossilis, Indian catfish	GRO	MPH	SMIX	NOAEL		31	d	0.002		mg/L	100	103239
Endosulfan	Heteropneustes fossilis, Indian catfish	GRO	MPH	SMIX	NOAEL		31	d	0.002		mg/L	100	103239
Endosulfan	Heteropneustes fossilis, Indian catfish	GRO	MPH	SMIX	NOAEL		30	d	0.002		mg/L	100	103205
Endosulfan	Heteropneustes fossilis, Indian catfish	GRO	MPH	SMIX	LOAEL		30	d	0.002		mg/L	100	103205
Endosulfan	Heteropneustes fossilis, Indian catfish	GRO	MPH	SMIX	LOAEL		30	d	0.002		mg/L	100	103205
Endosulfan	Heteropneustes fossilis, Indian catfish	GRO	MPH	SMIX	NOAEL		30	d	0.002		mg/L	100	103205
Endosulfan	Heteropneustes fossilis, Indian catfish	GRO	MPH	SMIX	NOAEL		30	d	0.002		mg/L	100	103205
Endosulfan	Labeo rohita, Rohu	GRO	GRO	LGTH	NOAEL		15	d	0.00025		mg/L	100	103203
Endosulfan	Labeo rohita, Rohu	GRO	GRO	WGHT	NOAEL		15	d	0.00025		mg/L	100	103203
Endosulfan	Labeo rohita, Rohu	GRO	GRO	COND	NOAEL		15	d	0.00025		mg/L	100	103203
Endosulfan	Labeo rohita, Rohu	GRO	MPH	WGHT	NOAEL		15	d	0.00025		mg/L	100	103203
Endosulfan	Labeo rohita, Rohu	GRO	GRO	GRRT	NOAEL		45	d	9.828E-05		mg/L	35	68250
Endosulfan	Lepomis macrochirus, Bluegill	GRO	MPH	DMTR	LOAEL		2	d	0.001		mg/L	100	96319
Endosulfan	Melanotaenia fluviatilis, Crimson-spotted rainbowfish	GRO	DVP	ABNM	NOAEL		0.17	d	0.05		mg/L	100	103200
Endosulfan	Melanotaenia fluviatilis, Crimson-spotted rainbowfish	GRO	MPH	SMIX	LOAEL		0.17	d	0.001		mg/L	100	103200

Table H-1. Freshwater Fish Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Oncorhynchus kisutch, Coho salmon, silver salmon	GRO	MPH	SMIX	NOAEL		30	d	0.00034		mg/L	96	2873
Endosulfan	Oryzias latipes, Medaka, high-eyes	GRO	DVP	DVLP	NOAEL		7	dph	0.00006		mg/L	100	89788
Endosulfan	Oryzias latipes, Medaka, high-eyes	GRO	GRO	LGTH	NOAEL		7	dph	0.00006		mg/L	100	89788
Endosulfan	Oryzias latipes, Medaka, high-eyes	GRO	MPH	WGHT	NOAEL		150	d	0.00006		mg/L	100	89788
Endosulfan	Oryzias latipes, Medaka, high-eyes	GRO	DVP	DVLP	NOAEL		NR	ht	0.001		mg/L	50	69838
Endosulfan	Oryzias latipes, Medaka, high-eyes	GRO	GRO	LGTH	NOAEL	LOAEL	7	d	0.00001	0.0001	mg/L	50	69838
Endosulfan	Oryzias latipes, Medaka, high-eyes	GRO	GRO	LGTH	NOAEL		4	wph	0.001		mg/L	50	69838
Endosulfan	Salmo salar, Atlantic salmon	GRO	GRO	WGHT	NOAEL		92	d	0.7		ppm	100	104113
Endosulfan	Salvelinus namaycush, Lake trout, siscowet	GRO	MPH	SMIX	LOAEL		30	d	0.00034		mg/L	96	2873
Endosulfan	Tilapia nilotica, Nile tilapia	GRO	MPH	SMIX	NOAEL	LOAEL	21	d	0.5	1	ppm	95	103222
Endosulfan	Anabas testudineus, Climbing perch	MOR	MOR	MORT	LC50		1	d	0.003		mg/L	100	5326
Endosulfan	Anabas testudineus, Climbing perch	MOR	MOR	MORT	LC50		3	d	0.0015		mg/L	100	5326
Endosulfan	Anabas testudineus, Climbing perch	MOR	MOR	MORT	LC50		4	d	0.0012		mg/L	100	5326
Endosulfan	Anabas testudineus, Climbing perch	MOR	MOR	MORT	LC50		2	d	0.0024		mg/L	100	5326
Endosulfan	Anguilla anguilla, Common eel	MOR	MOR	MORT	LC50		4	d	0.041		mg/L	100	11055
Endosulfan	Anguilla anguilla, Common eel	MOR	MOR	MORT	LC50		2	d	0.042		mg/L	100	11055
Endosulfan	Anguilla anguilla, Common eel	MOR	MOR	MORT	LC50		3	d	0.041		mg/L	100	11055

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Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Anguilla anguilla, Common eel	MOR	MOR	MORT	LC50		1	d	0.042		mg/L	100	11055
Endosulfan	Aplocheilichthys johnstonii, Tooth carp	MOR	MOR	MORT	LC50		1	d	0.00257		mg/L	100	15049
Endosulfan	Barbus conchoniuis, Rosy barb	MOR	MOR	MORT	LC50		2	d	0.02136		mg/L	100	7230
Endosulfan	Barbus javanicus, Barb	MOR	MOR	MORT	LC50		3	d	0.008821 TO 0.008876			100	12681
Endosulfan	Barbus javanicus, Barb	MOR	MOR	MORT	LC50		1	d	0.010372 TO 0.010403	mg/L		100	12681
Endosulfan	Barbus javanicus, Barb	MOR	MOR	MORT	LC50		4	d	0.008689 TO 0.008729	mg/L		100	12681
Endosulfan	Barbus javanicus, Barb	MOR	MOR	MORT	LC50		2	d	0.007111 TO 0.007143	mg/L		100	12681
Endosulfan	Barbus javanicus, Barb	MOR	MOR	MORT	LC50		4	d	0.006308 TO 0.006341	mg/L		100	12681
Endosulfan	Barbus javanicus, Barb	MOR	MOR	MORT	LC50		3	d	0.008327 TO 0.008389	mg/L		100	12681
Endosulfan	Barbus javanicus, Barb	MOR	MOR	MORT	LC50		4	d	0.008335 TO 0.008375	mg/L		100	12681
Endosulfan	Barbus javanicus, Barb	MOR	MOR	MORT	LC50		2	d	0.010303 TO 0.010336	mg/L		100	12681
Endosulfan	Barbus javanicus, Barb	MOR	MOR	MORT	LC50		3	d	0.006422 TO 0.006467	mg/L		100	12681
Endosulfan	Barbus javanicus, Barb	MOR	MOR	MORT	LC50		2	d	0.008688 TO 0.008725	mg/L		100	12681
Endosulfan	Barbus javanicus, Barb	MOR	MOR	MORT	LC50		1	d	0.008722 TO 0.008779	mg/L		100	12681

mg/L

Table H-1. Freshwater Fish Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Barbus javanicus, Barb	MOR	MOR	MORT	LC50		1	d	0.007361 TO 0.007402			100	12681
Endosulfan	Barbus sophore, Two spot barb, dotted barb	MOR	MOR	MORT	LC50		4	d	0.0012	mg/L	mg/L	100	9276
Endosulfan	Barbus sophore, Two spot barb, dotted barb	MOR	MOR	MORT	LC50		2	d	0.0014		mg/L	100	9276
Endosulfan	Barbus sophore, Two spot barb, dotted barb	MOR	MOR	MORT	LC50		0.9583333	d	0.0023		mg/L	100	9276
Endosulfan	Barbus sp., Barb	MOR	MOR	MORT	LC50		1	d	0.00122		mg/L	100	15049
Endosulfan	Barilius bendelisis, Cyprinid fish	MOR	MOR	MORT	LC50		4	d	0.01695		mg/L	100	89782
Endosulfan	Barilius bendelisis, Cyprinid fish	MOR	MOR	MORT	LC50		4	d	0.01471		mg/L	100	89782
Endosulfan	Bidyanus bidyanus, Silver perch	MOR	MOR	MORT	LC50		4	d	0.0023		mg/L	96.2	5850
Endosulfan	Bidyanus bidyanus, Silver perch	MOR	MOR	MORT	LC50		4	d	0.0024		mg/L	96.2	5850
Endosulfan	Catla catla, Catla	MOR	MOR	MORT	LC50		3	d	0.003336 TO 0.003388			100	12681
Endosulfan	Catla catla, Catla	MOR	MOR	MORT	LC50		4	d	0.000891 TO 0.000902	mg/L		100	12681
Endosulfan	Catla catla, Catla	MOR	MOR	MORT	LC50		1	d	0.004892 TO 0.0004919	mg/L		100	12681
Endosulfan	Catla catla, Catla	MOR	MOR	MORT	LC50		2	d	0.004811 TO 0.004854	mg/L		100	12681
Endosulfan	Catla catla, Catla	MOR	MOR	MORT	LC50		1	d	0.003251 TO 0.003295	mg/L		100	12681
Endosulfan	Catla catla, Catla	MOR	MOR	MORT	LC50		1	d	0.001921 TO 0.001961	mg/L		100	12681

mg/L

Table H-1. Freshwater Fish Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Catla catla, Catla	MOR	MOR	MORT	LC50		3	d	0.002786 TO 0.002815			100	12681
Endosulfan	Catla catla, Catla	MOR	MOR	MORT	LC50		2	d	0.003101 TO 0.003151	mg/L		100	12681
Endosulfan	Catla catla, Catla	MOR	MOR	MORT	LC50		2	d	0.001673 TO 0.001704	mg/L		100	12681
Endosulfan	Catla catla, Catla	MOR	MOR	MORT	LC50		3	d	0.00102 TO 0.001026	mg/L		100	12681
Endosulfan	Catla catla, Catla	MOR	MOR	MORT	LC50		4	d	0.002795 TO 0.002833	mg/L		100	12681
Endosulfan	Catla catla, Catla	MOR	MOR	MORT	LC50		4	d	0.003199 TO 0.003239	mg/L		100	12681
Endosulfan	Channa orientalis, Smooth-breasted snakefish	MOR	MOR	MORT	LC50		2	d	0.01088	mg/L	mg/L	100	5736
Endosulfan	Channa orientalis, Smooth-breasted snakefish	MOR	MOR	MORT	LC50		1	d	0.0112		mg/L	100	5736
Endosulfan	Channa orientalis, Smooth-breasted snakefish	MOR	MOR	MORT	LC50		2	d	0.01078		mg/L	100	5736
Endosulfan	Channa orientalis, Smooth-breasted snakefish	MOR	MOR	MORT	LC50		1	d	0.01116		mg/L	100	5736
Endosulfan	Channa orientalis, Smooth-breasted snakefish	MOR	MOR	MORT	LC50		4	d	0.01059		mg/L	100	5736
Endosulfan	Channa orientalis, Smooth-breasted snakefish	MOR	MOR	MORT	LC50		3	d	0.01061		mg/L	100	5736
Endosulfan	Channa orientalis, Smooth-breasted snakefish	MOR	MOR	MORT	LC50		1	d	0.01112		mg/L	100	5736
Endosulfan	Channa orientalis, Smooth-breasted snakefish	MOR	MOR	MORT	LC50		4	d	0.01055		mg/L	100	5736
Endosulfan	Channa orientalis, Smooth-breasted snakefish	MOR	MOR	MORT	LC50		2	d	0.01075		mg/L	100	5736

Table H-1. Freshwater Fish Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Channa orientalis, Smooth-breasted snakefish	MOR	MOR	MORT	LC50		3	d	0.01069		mg/L	100	5736
Endosulfan	Channa orientalis, Smooth-breasted snakefish	MOR	MOR	MORT	LC50		4	d	0.01064		mg/L	100	5736
Endosulfan	Channa orientalis, Smooth-breasted snakefish	MOR	MOR	MORT	LC50		1	d	0.01114		mg/L	100	5736
Endosulfan	Channa orientalis, Smooth-breasted snakefish	MOR	MOR	MORT	LC50		4	d	0.0106		mg/L	100	5736
Endosulfan	Channa orientalis, Smooth-breasted snakefish	MOR	MOR	MORT	LC50		3	d	0.01067		mg/L	100	5736
Endosulfan	Channa orientalis, Smooth-breasted snakefish	MOR	MOR	MORT	LC50		3	d	0.01065		mg/L	100	5736
Endosulfan	Channa orientalis, Smooth-breasted snakefish	MOR	MOR	MORT	LC50		2	d	0.01081		mg/L	100	5736
Endosulfan	Channa punctata, Snake-head catfish	MOR	MOR	MORT	LC50		4	d	3.07		mg/L	100	11888
Endosulfan	Channa punctata, Snake-head catfish	MOR	MOR	MORT	LC50		1	d	11.26		mg/L	100	11888
Endosulfan	Channa punctata, Snake-head catfish	MOR	MOR	MORT	LC50		3	d	7.56		mg/L	100	11888
Endosulfan	Channa punctata, Snake-head catfish	MOR	MOR	MORT	LC50		4	d	5.78		mg/L	100	11888
Endosulfan	Channa punctata, Snake-head catfish	MOR	MOR	MORT	LC50		2	d	5.83		mg/L	100	11888
Endosulfan	Channa punctata, Snake-head catfish	MOR	MOR	MORT	LC50		2	d	9.68		mg/L	100	11888
Endosulfan	Channa punctata, Snake-head catfish	MOR	MOR	MORT	LC50		1	d	7.44		mg/L	100	11888
Endosulfan	Channa punctata, Snake-head catfish	MOR	MOR	MORT	LC50		3	d	4.39		mg/L	100	11888
Endosulfan	Channa punctata, Snake-head catfish	MOR	MOR	MORT	LC50		4	d	0.0025		mg/L	100	15157
Endosulfan I	Channa punctata, Snake-head catfish	MOR	MOR	MORT	LC50		4	d	0.00016		mg/L	100	15157

Table H-1. Freshwater Fish Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Channa punctata, Snake-head catfish	MOR	MOR	MORT	LC50		4	d	0.0048		mg/L	100	15157
Endosulfan II	Channa punctata, Snake-head catfish	MOR	MOR	MORT	LC50		4	d	0.0066		mg/L	100	15157
Endosulfan	Channa punctata, Snake-head catfish	MOR	MOR	MORT	LC50		4	d	0.016		mg/L	100	15157
Endosulfan	Channa punctata, Snake-head catfish	MOR	MOR	MORT	LC50		4	d	0.00775		mg/L	35	95817
Endosulfan	Clarias batrachus, Walking catfish	MOR	MOR	MORT	LC50		28	d	0.0003		mg/L	100	16588
Endosulfan	Clarias batrachus, Walking catfish	MOR	MOR	MORT	LC50		7	d	7.4		nM	100	72552
Endosulfan	Clarias batrachus, Walking catfish	MOR	MOR	MORT	LC50		4	d	0.2		mg/L	100	88885
Endosulfan	Clarias batrachus, Walking catfish	MOR	MOR	MORT	NR-LETH			d	0.8		mg/L	100	88885
Endosulfan	Clarias batrachus, Walking catfish	MOR	MOR	MORT	LC50		4	d	0.576		mg/L	100	89006
Endosulfan	Ctenopharyngodon idella, Grass carp, white amur	MOR	MOR	MORT	LC50	4	2	d	0.002523 TO 0.002771			100	12681
Endosulfan	Ctenopharyngodon idella, Grass carp, white amur	MOR	MOR	MORT	LC50		4	d	0.003712 TO 0.003766	mg/L		100	12681
Endosulfan	Ctenopharyngodon idella, Grass carp, white amur	MOR	MOR	MORT	LC50		1	d	0.005741 TO 0.005791	mg/L		100	12681
Endosulfan	Ctenopharyngodon idella, Grass carp, white amur	MOR	MOR	MORT	LC50		3	d	0.003701 TO 0.003778	mg/L		100	12681
Endosulfan	Ctenopharyngodon idella, Grass carp, white amur	MOR	MOR	MORT	LC50		3	d	0.004201 TO 0.004258	mg/L		100	12681
Endosulfan	Ctenopharyngodon idella, Grass carp, white amur	MOR	MOR	MORT	LC50		4	d	0.001711 TO 0.001767	mg/L		100	12681

mg/L

Table H-1. Freshwater Fish Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Ctenopharyngodon idella, Grass carp, white amur	MOR	MOR	MORT	LC50		2	d	0.005697 TO 0.005724			100	12681
Endosulfan	Ctenopharyngodon idella, Grass carp, white amur	MOR	MOR	MORT	LC50		4	d	0.004078 TO 0.004113	mg/L		100	12681
Endosulfan	Ctenopharyngodon idella, Grass carp, white amur	MOR	MOR	MORT	LC50		1	d	0.004122 TO 0.004167	mg/L		100	12681
Endosulfan	Ctenopharyngodon idella, Grass carp, white amur	MOR	MOR	MORT	LC50		3	d	0.001872 TO 0.001893	mg/L		100	12681
Endosulfan	Ctenopharyngodon idella, Grass carp, white amur	MOR	MOR	MORT	LC50		2	d	0.0041 TO 0.004113	mg/L		100	12681
Endosulfan	Ctenopharyngodon idella, Grass carp, white amur	MOR	MOR	MORT	LC50		1	d	0.002799 TO 0.00283	mg/L		100	12681
Endosulfan	Cyprinus carpio, common carp	MOR	MOR	MORT	LC50		4	d	0.0095	mg/L	mg/L	95.5	103230
Endosulfan	Cyprinus carpio, common carp	MOR	MOR	MORT	LC50		7	d	0.00092		mg/L	100	5649
Endosulfan	Cyprinus carpio, common carp	MOR	MOR	MORT	LC50		4	d	0.0001		mg/L	96.2	5850
Endosulfan	Cyprinus carpio, common carp	MOR	MOR	MORT	LC50		1 TO 4	d	0.00198		mg/L	100	13221
Endosulfan	Cyprinus carpio, Carp	MOR	MOR	MORT	LC50		4	d	0.0052		mg/L	100	17179
Endosulfan	Cyprinus carpio, common carp	MOR	MOR	MORT	LC50		4	d	0.022		mg/L	97	71889
Endosulfan	Danio rerio, Zebra danio	MOR	MOR	MORT	LC50		0.08	d	1000 TO 3500		mg/L	100	17456
Endosulfan	Danio rerio, Zebra danio	MOR	MOR	MORT	LC50		0.17	d	<1000		mg/L	100	17456
Endosulfan	Danio rerio, Zebra danio	MOR	MOR	MORT	LC50		1	d	<1000		mg/L	100	17456
Endosulfan	Danio rerio, Zebra danio	MOR	MOR	MORT	LC50		0.25	d	<1000		mg/L	100	17456

Table H-1. Freshwater Fish Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Gambusia affinis, Western mosquitofish	MOR	MOR	MORT	LC50		2	d	0.0094		mg/L	100	568
Endosulfan	Gambusia affinis, Western mosquitofish	MOR	MOR	MORT	LC50		4	d	0.0032		mg/L	100	568
Endosulfan	Gambusia affinis, Western mosquitofish	MOR	MOR	MORT	LC50		1	d	0.012		mg/L	100	568
Endosulfan	Gambusia affinis, Western mosquitofish	MOR	MOR	MORT	LC50		3	d	0.0038		mg/L	100	568
Endosulfan	Gambusia affinis, Western mosquitofish	MOR	MOR	MORT	LC50		2	d	0.0048		mg/L	100	568
Endosulfan	Gambusia affinis, Western mosquitofish	MOR	MOR	MORT	LC50		1	d	0.006		mg/L	100	568
Endosulfan	Gambusia affinis, Western mosquitofish	MOR	MOR	MORT	LC50		3	d	0.007		mg/L	100	568
Endosulfan	Gambusia affinis, Western mosquitofish	MOR	MOR	MORT	LC50		4	d	0.008		mg/L	100	568
Endosulfan	Gambusia affinis, Western mosquitofish	MOR	MOR	MORT	LC50		4	d	0.0013		mg/L	100	5806
Endosulfan	Gambusia affinis, Western mosquitofish	MOR	MOR	MORT	LC50		4	d	0.0023		mg/L	96.2	5850
Endosulfan	Gambusia affinis, Western mosquitofish	MOR	MOR	MORT	NOAEL		35	d	0.0009 TO 0.001881			99	103218
Endosulfan	Gambusia affinis, Western mosquitofish	MOR	MOR	MORT	NOAEL		35	d	0.0009 TO 0.001881			99	103218
Endosulfan	Gambusia affinis, Western mosquitofish	MOR	MOR	MORT	LC95		1	d	0.0916		mg/L	100	12022
Endosulfan	Gambusia affinis, Western mosquitofish	MOR	MOR	MORT	LC50		1	d	0.037		mg/L	100	12022
Endosulfan	Heteropneustes fossilis, Indian catfish	MOR	MOR	MORT	LD50		4	d	0.0108		mg/L	100	7375
Endosulfan	Heteropneustes fossilis, Indian catfish	MOR	MOR	MORT	LC50		7	d	0.00157		mg/L	100	5649
Endosulfan	Heteropneustes fossilis, Indian catfish	MOR	MOR	MORT	LC50		4	d	0.0074		mg/L	100	10497

Table H-1. Freshwater Fish Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Heteropneustes fossilis, Indian catfish	MOR	MOR	MORT	LC50		4	d	0.0106		mg/L	100	10497
Endosulfan	Heteropneustes fossilis, Indian catfish	MOR	MOR	MORT	LC50		4	d	0.0103		mg/L	100	10497
Endosulfan	Heteropneustes fossilis, Indian catfish	MOR	MOR	MORT	LC50		4	d	0.0222		mg/L	100	10497
Endosulfan	Heteropneustes fossilis, Indian catfish	MOR	MOR	MORT	LC50		4	d	0.0228		mg/L	100	10497
Endosulfan	Heteropneustes fossilis, Indian catfish	MOR	MOR	MORT	LC50		4	d	0.01		mg/L	100	10497
Endosulfan	Heteropneustes fossilis, Indian catfish	MOR	MOR	MORT	LC50		4	d	0.0151		mg/L	100	10497
Endosulfan	Heteropneustes fossilis, Indian catfish	MOR	MOR	MORT	LC50		4	d	0.0077		mg/L	100	10497
Endosulfan	Heteropneustes fossilis, Indian catfish	MOR	MOR	MORT	LC50		4	d	0.0181		mg/L	100	10497
Endosulfan	Heteropneustes fossilis, Indian catfish	MOR	MOR	MORT	LC50		4	d	0.0228		mg/L	100	10497
Endosulfan	Heteropneustes fossilis, Indian catfish	MOR	MOR	MORT	LC50		4	d	0.0098		mg/L	100	10497
Endosulfan	Heteropneustes fossilis, Indian catfish	MOR	MOR	MORT	LC50		4	d	0.0078		mg/L	100	10497
Endosulfan	Heteropneustes fossilis, Indian catfish	MOR	MOR	MORT	LC50		4	d	0.0077		mg/L	100	10497
Endosulfan	Heteropneustes fossilis, Indian catfish	MOR	MOR	MORT	LC50		4	d	0.0127		mg/L	100	10497
Endosulfan	Heteropneustes fossilis, Indian catfish	MOR	MOR	MORT	LC50		4	d	0.0169		mg/L	100	10497
Endosulfan	Heteropneustes fossilis, Indian catfish	MOR	MOR	MORT	LC50		4	d	0.017		mg/L	100	10497
Endosulfan	Heteropneustes fossilis, Indian catfish	MOR	MOR	MORT	LC50		4	d	0.0141		mg/L	100	10497
Endosulfan	Heteropneustes fossilis, Indian catfish	MOR	MOR	MORT	LC50		4	d	0.0199		mg/L	100	10497

Table H-1. Freshwater Fish Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Heteropneustes fossilis, Indian catfish	MOR	MOR	MORT	LC50		4	d	0.0203		mg/L	100	10497
Endosulfan	Heteropneustes fossilis, Indian catfish	MOR	MOR	MORT	LC50		4	d	0.0124		mg/L	100	10497
Endosulfan	Heteropneustes fossilis, Indian catfish	MOR	MOR	MORT	LC50		4	d	0.0091		mg/L	100	10497
Endosulfan	Heteropneustes fossilis, Indian catfish	MOR	MOR	MORT	LC50		4	d	0.0143		mg/L	100	10497
Endosulfan	Heteropneustes fossilis, Indian catfish	MOR	MOR	MORT	LC50		4	d	0.0141		mg/L	100	10497
Endosulfan	Heteropneustes fossilis, Indian catfish	MOR	MOR	MORT	LC50		4	d	0.0107		mg/L	100	10497
Endosulfan	Heteropneustes fossilis, Indian catfish	MOR	MOR	MORT	LC50		4	d	0.0108		mg/L	100	15179
Endosulfan	Heteropneustes fossilis, Indian catfish	MOR	MOR	MORT	LC50		3	d	0.0109		mg/L	100	15179
Endosulfan	Heteropneustes fossilis, Indian catfish	MOR	MOR	MORT	LC50		1	d	0.0111		mg/L	100	15179
Endosulfan	Heteropneustes fossilis, Indian catfish	MOR	MOR	MORT	LC50		2	d	0.0109		mg/L	100	15179
Endosulfan	Hypophthalmichthys molitrix, Silver carp	MOR	MOR	MORT	LC50		3	d	0.002239 TO 0.002313			100	12681
Endosulfan	Hypophthalmichthys molitrix, Silver carp	MOR	MOR	MORT	LC50		1	d	0.004302 TO 0.004341	mg/L		100	12681
Endosulfan	Hypophthalmichthys molitrix, Silver carp	MOR	MOR	MORT	LC50		3	d	0.000382 TO 0.000427	mg/L		100	12681
Endosulfan	Hypophthalmichthys molitrix, Silver carp	MOR	MOR	MORT	LC50		2	d	0.001076 TO 0.001105	mg/L		100	12681
Endosulfan	Hypophthalmichthys molitrix, Silver carp	MOR	MOR	MORT	LC50		4	d	0.002272 TO 0.0023	mg/L		100	12681
Endosulfan	Hypophthalmichthys molitrix, Silver carp	MOR	MOR	MORT	LC50		3	d	0.0026 TO 0.002653			100	12681

mg/L

mg/L

Table H-1. Freshwater Fish Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Hypophthalmichthys molitrix, Silver carp	MOR	MOR	MORT	LC50		1	d	0.002671 TO 0.002717			100	12681
Endosulfan	Hypophthalmichthys molitrix, Silver carp	MOR	MOR	MORT	LC50		4	d	0.002428 TO 0.002498	mg/L		100	12681
Endosulfan	Hypophthalmichthys molitrix, Silver carp	MOR	MOR	MORT	LC50		2	d	0.004083 TO 0.004112	mg/L		100	12681
Endosulfan	Hypophthalmichthys molitrix, Silver carp	MOR	MOR	MORT	LC50		1	d	0.001331 TO 0.001367	mg/L		100	12681
Endosulfan	Hypophthalmichthys molitrix, Silver carp	MOR	MOR	MORT	LC50		4	d	0.000261 TO 0.000301	mg/L		100	12681
Endosulfan	Hypophthalmichthys molitrix, Silver carp	MOR	MOR	MORT	LC50		2	d	0.002613 TO 0.002652	mg/L		100	12681
Endosulfan	Hypophthalmichthys molitrix, Silver carp	MOR	MOR	MORT	LC50		1	d	0.000403	mg/L	mg/L	100	17793
Endosulfan	Jenynsia multidentata, Onesided Livebearer	MOR	MOR	MORT	LC50		4	d	0.0007		mg/L	35	103207
Endosulfan	Jenynsia multidentata, Onesided Livebearer	MOR	MOR	MORT	LC50		4	d	0.0013		mg/L	35	103207
Endosulfan	Jenynsia multidentata, Onesided Livebearer	MOR	MOR	MORT	NR-LETH			d	0.0035		mg/L	35	103207
Endosulfan II	Labeo rohita, Rohu	MOR	MOR	MORT	LC50		4	d	0.0071		mg/L	100	468
Endosulfan I	Labeo rohita, Rohu	MOR	MOR	MORT	LC50	4	4	d	0.001		mg/L	100	468
Endosulfan I	Labeo rohita, Rohu	MOR	MOR	MORT	LC50		4	d	0.00033		mg/L	100	468
Endosulfan	Labeo rohita, Rohu	MOR	MOR	MORT	LC50		2	d	0.004299 TO 0.004331			100	12681
Endosulfan	Labeo rohita, Rohu	MOR	MOR	MORT	LC50		4	d	0.000356 TO 0.000371	mg/L		100	12681

mg/L

Table H-1. Freshwater Fish Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Labeo rohita, Rohu	MOR	MOR	MORT	LC50		3	d	0.002801 TO 0.002861			100	12681
Endosulfan	Labeo rohita, Rohu	MOR	MOR	MORT	LC50		3	d	0.002303 TO 0.002349	mg/L		100	12681
Endosulfan	Labeo rohita, Rohu	MOR	MOR	MORT	LC50		1	d	0.002722 TO 0.002754	mg/L		100	12681
Endosulfan	Labeo rohita, Rohu	MOR	MOR	MORT	LC50		4	d	0.002298 TO 0.002333	mg/L		100	12681
Endosulfan	Labeo rohita, Rohu	MOR	MOR	MORT	LC50		1	d	0.001387 TO 0.001419	mg/L		100	12681
Endosulfan	Labeo rohita, Rohu	MOR	MOR	MORT	LC50		2	d	0.001121 TO 0.001159	mg/L		100	12681
Endosulfan	Labeo rohita, Rohu	MOR	MOR	MORT	LC50		4	d	0.002688 TO 0.002721	mg/L		100	12681
Endosulfan	Labeo rohita, Rohu	MOR	MOR	MORT	LC50		1	d	0.004341 TO 0.004381	mg/L		100	12681
Endosulfan	Labeo rohita, Rohu	MOR	MOR	MORT	LC50		3	d	0.000433 TO 0.000493	mg/L		100	12681
Endosulfan	Labeo rohita, Rohu	MOR	MOR	MORT	LC50		2	d	0.002601 TO 0.002671	mg/L		100	12681
Endosulfan	Macquaria ambigua, Yellowbelly, Golden Perch	MOR	MOR	MORT	LC50		4	d	0.0003	mg/L	mg/L	96.2	5850
Endosulfan	Macquaria ambigua, Yellowbelly, Golden Perch	MOR	MOR	MORT	LC50		4	d	0.0005		mg/L	96.2	5850
Endosulfan	Macropodus cupanus, Paradise fish	MOR	MOR	MORT	LC50		4	d	9.61		mg/L	100	87644
Endosulfan	Macropodus cupanus, Paradise fish	MOR	MOR	MORT	LC50		1	d	12.36		mg/L	100	87644

Table H-1. Freshwater Fish Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Macropodus cupanus, Paradise fish	MOR	MOR	MORT	LC50		2	d	10.9		mg/L	100	87644
Endosulfan	Macropodus cupanus, Paradise fish	MOR	MOR	MORT	LC50		3	d	10.27		mg/L	100	87644
Endosulfan	Melanotaenia duboulayi, Eastern rainbow fish	MOR	MOR	MORT	LC50		4	d	0.005		mg/L	96.2	5850
Endosulfan	Melanotaenia duboulayi, Eastern rainbow fish	MOR	MOR	MORT	LC50		4	d	0.0005		mg/L	96.2	5850
Endosulfan	Melanotaenia duboulayi, Eastern rainbow fish	MOR	MOR	MORT	LC50		4	d	0.0024		mg/L	96.2	5850
Endosulfan	Melanotaenia duboulayi, Eastern rainbow fish	MOR	MOR	MORT	LC50		4	d	0.0025		mg/L	96.2	5850
Endosulfan	Melanotaenia fluviatilis, Crimson-spotted rainbowfish	MOR	MOR	MORT	NR-ZERO			d	0.00679		mg/L	100	17391
Endosulfan	Melanotaenia fluviatilis, Crimson-spotted rainbowfish	MOR	MOR	HTCH	LOAEL		0.17	d	0.001		mg/L	100	103200
Endosulfan	Monopterus albus, Swamp or White Ricefield Eel	MOR	MOR	MORT	NR-LETH	9	0.04	d	0.01		mg/L	33	100663
Endosulfan	Monopterus albus, Swamp or White Ricefield Eel	MOR	MOR	MORT	LC50		0.04	d	0.0034		mg/L	33	100663
Endosulfan	Monopterus albus, Swamp or White Ricefield Eel	MOR	MOR	MORT	LC50		1	d	0.00073		mg/L	33	100663
Endosulfan	Monopterus albus, Swamp or White Ricefield Eel	MOR	MOR	MORT	LC50		2	d	0.00059		mg/L	33	100663
Endosulfan	Monopterus albus, Swamp or White Ricefield Eel	MOR	MOR	MORT	LC50		3	d	0.0005		mg/L	33	100663
Endosulfan	Monopterus albus, Swamp or White Ricefield Eel	MOR	MOR	MORT	LC50		4	d	0.00042		mg/L	33	100663
Endosulfan	Morone saxatilis, Striped bass	MOR	MOR	MORT	LC50		4	d	0.00023		mg/L	100	15472
Endosulfan	Morone saxatilis, Striped bass	MOR	MOR	MORT	LC50		4	d	0.00029		mg/L	100	15472
Endosulfan	Morone saxatilis, Striped bass	MOR	MOR	MORT	LC50		4	d	0.00022		mg/L	100	15472

Table H-1. Freshwater Fish Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Morone saxatilis, Striped bass	MOR	MOR	MORT	LC50		4	d	0.00043		mg/L	100	15472
Endosulfan	Morone saxatilis, Striped bass	MOR	MOR	MORT	LC50		4	d	0.00035		mg/L	100	15472
Endosulfan	Morone saxatilis, Striped bass	MOR	MOR	MORT	LC50		4	d	<0.33		mg/L	100	15472
Endosulfan	Morone saxatilis, Striped bass	MOR	MOR	MORT	LC50		4	d	0.00023		mg/L	100	15472
Endosulfan	Mystus vittatus, Striped catfish	MOR	MOR	MORT	LC50		4	d	0.002		mg/L	35	104114
Endosulfan	Nematolosa erebi, Bony bream	MOR	MOR	MORT	LC50		4	d	0.0002		mg/L	96.2	5850
Endosulfan	NR NR, Minnow,carp family	MOR	MOR	MORT	NR-ZERO			d	0.005		mg/L	100	2131
Endosulfan	NR NR, Minnow,carp family	MOR	MOR	MORT	NR-LETH			d	0.025		mg/L	100	2131
Endosulfan	Oncorhynchus kisutch, Coho salmon,silver salmon	MOR	MOR	MORT	NR-ZERO	4		d	0.00057		mg/L	99	87973
Endosulfan I	Oncorhynchus mykiss, Rainbow trout,donaldson trout	MOR	MOR	MORT	LC50	4	1	d	0.0004975 TO 0.00199			99.5	87973
Endosulfan I	Oncorhynchus mykiss, Rainbow trout,donaldson trout	MOR	MOR	MORT	LC50		2	d	0.0004975 TO 0.000995	mg/L		99.5	87973
Endosulfan I	Oncorhynchus mykiss, Rainbow trout,donaldson trout	MOR	MOR	MORT	LC50		3	d	0.0004975 TO 0.000995	mg/L		99.5	87973
Endosulfan I	Oncorhynchus mykiss, Rainbow trout,donaldson trout	MOR	MOR	MORT	LC50		4	d	0.0004975	mg/L	mg/L	99.5	87973
Endosulfan II	Oncorhynchus mykiss, Rainbow trout,donaldson trout	MOR	MOR	MORT	LC50		1	d	0.003972 TO 0.011916			99.3	87973
Endosulfan II	Oncorhynchus mykiss, Rainbow trout,donaldson trout	MOR	MOR	MORT	LC50		2	d	0.0040713 TO 0.005958	mg/L		99.3	87973

mg/L

Table H-1. Freshwater Fish Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan II	Oncorhynchus mykiss, Rainbow trout,donaldson trout	MOR	MOR	MORT	LC50		3	d	0.0030783 TO 0.0044685			99.3	87973
Endosulfan II	Oncorhynchus mykiss, Rainbow trout,donaldson trout	MOR	MOR	MORT	LC50		4	d	0.0027804 TO 0.003972	mg/L		99.3	87973
Endosulfan	Oncorhynchus mykiss, Rainbow trout,donaldson trout	MOR	MOR	MORT	LC50		1	d	0.00099 TO 0.00198	mg/L		99	87973
Endosulfan	Oncorhynchus mykiss, Rainbow trout,donaldson trout	MOR	MOR	MORT	LC50		2	d	0.000891 TO 0.001188	mg/L		99	87973
Endosulfan	Oncorhynchus mykiss, Rainbow trout,donaldson trout	MOR	MOR	MORT	LC50		3	d	0.000693 TO 0.000891	mg/L		99	87973
Endosulfan	Oncorhynchus mykiss, Rainbow trout,donaldson trout	MOR	MOR	MORT	LC50		4	d	0.000594 TO 0.000792	mg/L		99	87973
Endosulfan sulphate	Oncorhynchus mykiss, Rainbow trout,donaldson trout	MOR	MOR	MORT	LC50		1	d	0.00196 TO 0.00392	mg/L		98	87973
Endosulfan sulphate	Oncorhynchus mykiss, Rainbow trout,donaldson trout	MOR	MOR	MORT	LC50		2	d	0.001372 TO 0.001666	mg/L		98	87973
Endosulfan sulphate	Oncorhynchus mykiss, Rainbow trout,donaldson trout	MOR	MOR	MORT	LC50		3	d	0.001274 TO 0.001666	mg/L		98	87973
Endosulfan sulphate	Oncorhynchus mykiss, Rainbow trout,donaldson trout	MOR	MOR	MORT	LC50		4	d	0.001274 TO 0.001568	mg/L		98	87973
Endosulfan	Oncorhynchus mykiss, Rainbow trout,donaldson trout	MOR	MOR	MORT	LC50		1	d	0.00272 TO 0.00544	mg/L		40	87973
Endosulfan	Oncorhynchus mykiss, Rainbow trout,donaldson trout	MOR	MOR	MORT	LC50		2	d	0.00136 TO 0.00544	mg/L		40	87973
Endosulfan	Oncorhynchus mykiss, Rainbow trout,donaldson trout	MOR	MOR	MORT	LC50		3	d	0.00172 TO 0.00224	mg/L		40	87973

mg/L

Table H-1. Freshwater Fish Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Oncorhynchus mykiss, Rainbow trout,donaldson trout	MOR	MOR	MORT	LC50		4	d	0.0016 TO 0.00208			40	87973
Endosulfan	Oncorhynchus mykiss, Rainbow trout,donaldson trout	MOR	MOR	MORT	LC50		1	d	0.0025 TO 0.005			50	87973
Endosulfan	Oncorhynchus mykiss, Rainbow trout,donaldson trout	MOR	MOR	MORT	LC50		2	d	0.00125 TO 0.0025	mg/L		50	87973
Endosulfan	Oncorhynchus mykiss, Rainbow trout,donaldson trout	MOR	MOR	MORT	LC50		3	d	0.0016 TO 0.002	mg/L		50	87973
Endosulfan	Oncorhynchus mykiss, Rainbow trout,donaldson trout	MOR	MOR	MORT	LC50		4	d	0.00155 TO 0.00195	mg/L		50	87973
Endosulfan	Oncorhynchus mykiss, Rainbow trout,donaldson trout	MOR	MOR	MORT	NR-ZERO			d	0.0001	mg/L	mg/L	99	87973
Endosulfan	Oncorhynchus mykiss, Rainbow trout,donaldson trout	MOR	MOR	MORT	LC50		1	d	0.01978		mg/L	32.9	94051
Endosulfan	Oncorhynchus mykiss, Rainbow trout,donaldson trout	MOR	MOR	MORT	LC50	4	2	d	0.00889		mg/L	32.9	94051
Endosulfan	Oncorhynchus mykiss, Rainbow trout,donaldson trout	MOR	MOR	MORT	LC50		3	d	0.00528		mg/L	32.9	94051
Endosulfan	Oncorhynchus mykiss, Rainbow trout,donaldson trout	MOR	MOR	MORT	LC50		4	d	0.00175		mg/L	32.9	94051
Endosulfan	Oncorhynchus mykiss, Rainbow trout,donaldson trout	MOR	MOR	MORT	NR-LETH			d	0.01978		mg/L	32.9	94051
Endosulfan	Oncorhynchus mykiss, Rainbow trout,donaldson trout	MOR	MOR	MORT	NR-LETH			d	0.01978		mg/L	32.9	94051
Endosulfan	Oncorhynchus mykiss, Rainbow trout,donaldson trout	MOR	MOR	MORT	NR-ZERO	1		d	0.01978		mg/L	32.9	94051
Endosulfan	Oncorhynchus mykiss, Rainbow trout,donaldson trout	MOR	MOR	MORT	LC50	1	4	d	0.0016		mg/L	96.2	5850
Endosulfan	Oncorhynchus mykiss, Rainbow trout,donaldson trout	MOR	MOR	MORT	LC50	1	4	d	0.0007		mg/L	96.2	5850
Endosulfan	Oncorhynchus mykiss, Rainbow trout,donaldson trout	MOR	MOR	MORT	LC50		4	d	0.00017		mg/L	100	9479
Endosulfan	Oncorhynchus mykiss, Rainbow trout,donaldson trout	MOR	MOR	MORT	LC50		4	d	0.00027		mg/L	100	9479

Table H-1. Freshwater Fish Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Oncorhynchus mykiss, Rainbow trout,donaldson trout	MOR	MOR	MORT	LC50		4	d	0.00049		mg/L	100	9479
Endosulfan	Oncorhynchus mykiss, Rainbow trout,donaldson trout	MOR	MOR	MORT	LC50		4	d	0.00079		mg/L	100	9479
Endosulfan	Oncorhynchus mykiss, Rainbow trout,donaldson trout	MOR	MOR	MORT	LC50		4	d	0.00134		mg/L	100	9479
Endosulfan	Oncorhynchus mykiss, Rainbow trout,donaldson trout	MOR	MOR	MORT	LC50		4	d	0.00063		mg/L	100	9479
Endosulfan	Oncorhynchus mykiss, Rainbow trout,donaldson trout	MOR	MOR	MORT	LC50		4	d	0.00024		mg/L	100	9479
Endosulfan	Oncorhynchus mykiss, Rainbow trout,donaldson trout	MOR	MOR	MORT	LC50		4	d	0.0008		mg/L	100	9479
Endosulfan	Oncorhynchus mykiss, Rainbow trout,donaldson trout	MOR	MOR	MORT	LC50		4	d	0.00169		mg/L	100	9479
Endosulfan	Oncorhynchus mykiss, Rainbow trout,donaldson trout	MOR	MOR	MORT	LC50		4	d	0.00163		mg/L	100	9479
Endosulfan	Oncorhynchus mykiss, Rainbow trout,donaldson trout	MOR	MOR	MORT	LC50		4	d	0.00042		mg/L	100	9479
Endosulfan	Oncorhynchus mykiss, Rainbow trout,donaldson trout	MOR	MOR	MORT	LC50		4	d	0.00041		mg/L	100	9479
Endosulfan	Oncorhynchus mykiss, Rainbow trout,donaldson trout	MOR	MOR	MORT	LC50		4	d	0.00089		mg/L	100	9479
Endosulfan	Oncorhynchus mykiss, Rainbow trout,donaldson trout	MOR	MOR	MORT	LC50		4	d	0.00026		mg/L	100	9479
Endosulfan	Oncorhynchus mykiss, Rainbow trout,donaldson trout	MOR	MOR	MORT	LC50		4	d	0.00243		mg/L	100	9479
Endosulfan	Oncorhynchus mykiss, Rainbow trout,donaldson trout	MOR	MOR	MORT	LC50		4	d	0.0003		mg/L	100	9479
Endosulfan	Oncorhynchus mykiss, Rainbow trout,donaldson trout	MOR	MOR	MORT	LC50		4	d	0.00029		mg/L	100	9479
Endosulfan	Oncorhynchus mykiss, Rainbow trout,donaldson trout	MOR	MOR	MORT	LC50		4	d	0.0013		mg/L	100	9479
Endosulfan	Oncorhynchus mykiss, Rainbow trout,donaldson trout	MOR	MOR	MORT	LC50		4	d	0.00026		mg/L	100	9479

Table H-1. Freshwater Fish Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Oncorhynchus mykiss, Rainbow trout,donaldson trout	MOR	MOR	MORT	LC50		4	d	0.00121		mg/L	100	9479
Endosulfan	Oncorhynchus mykiss, Rainbow trout,donaldson trout	MOR	MOR	MORT	LC50		4	d	0.00069		mg/L	100	9479
Endosulfan	Oncorhynchus mykiss, Rainbow trout,donaldson trout	MOR	MOR	MORT	LC50		4	d	0.00032		mg/L	100	9479
Endosulfan	Oncorhynchus mykiss, Rainbow trout,donaldson trout	MOR	MOR	MORT	LC50		4	d	0.00075		mg/L	100	9479
Endosulfan	Oncorhynchus mykiss, Rainbow trout,donaldson trout	MOR	MOR	MORT	LC50		4	d	0.00069		mg/L	100	9479
Endosulfan	Oncorhynchus mykiss, Rainbow trout,donaldson trout	MOR	MOR	MORT	NR-ZERO			d	0.0001		mg/L	100	19059
Endosulfan	Oryzias latipes, Medaka, high-eyes	MOR	MOR	SVVS	NOAEL		7	dph	0.00006		mg/L	100	89788
Endosulfan	Oryzias latipes, Medaka, high-eyes	MOR	MOR	HTCH	NOAEL	28	NR	ht	0.001		mg/L	50	69838
Endosulfan	Oryzias latipes, Medaka, high-eyes	MOR	MOR	SVVS	NOAEL		4	wph	0.001		mg/L	50	69838
Endosulfan	Pimephales promelas, Fathead minnow	MOR	MOR	MORT	LC50		4	d	0.00076		mg/L	100	9479
Endosulfan	Pimephales promelas, Fathead minnow	MOR	MOR	MORT	LC50		4	d	0.00081		mg/L	100	9479
Endosulfan	Pimephales promelas, Fathead minnow	MOR	MOR	MORT	LC50		4	d	0.0008		mg/L	100	9479
Endosulfan	Pimephales promelas, Fathead minnow	MOR	MOR	MORT	LC50		4	d	0.00045		mg/L	100	9479
Endosulfan	Pimephales promelas, Fathead minnow	MOR	MOR	MORT	LC50		4	d	0.0021		mg/L	100	9479
Endosulfan	Pimephales promelas, Fathead minnow	MOR	MOR	MORT	LC50		4	d	0.00167		mg/L	100	9479
Endosulfan	Pimephales promelas, Fathead minnow	MOR	MOR	MORT	LC50		4	d	0.00148		mg/L	100	9479
Endosulfan	Pimephales promelas, Fathead minnow	MOR	MOR	MORT	LC50		4	d	0.0032		mg/L	100	9479

Table H-1. Freshwater Fish Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Pimephales promelas, Fathead minnow	MOR	MOR	MORT	LC50		4	d	0.0019		mg/L	100	9479
Endosulfan	Pimephales promelas, Fathead minnow	MOR	MOR	MORT	LC50		4	d	0.00345		mg/L	100	9479
Endosulfan	Pimephales promelas, Fathead minnow	MOR	MOR	MORT	LC50		4	d	0.001		mg/L	100	9479
Endosulfan	Pimephales promelas, Fathead minnow	MOR	MOR	MORT	LC50		4	d	0.0017		mg/L	100	9479
Endosulfan	Pimephales promelas, Fathead minnow	MOR	MOR	MORT	LC50		4	d	0.00135		mg/L	100	9479
Endosulfan	Pimephales promelas, Fathead minnow	MOR	MOR	MORT	LC50		4	d	0.00073		mg/L	100	9479
Endosulfan	Pimephales promelas, Fathead minnow	MOR	MOR	MORT	LC50		4	d	0.0012		mg/L	100	9479
Endosulfan	Pimephales promelas, Fathead minnow	MOR	MOR	MORT	LC50		4	d	0.00191		mg/L	100	9479
Endosulfan	Pimephales promelas, Fathead minnow	MOR	MOR	MORT	LC50		4	d	0.00097		mg/L	100	9479
Endosulfan	Pimephales promelas, Fathead minnow	MOR	MOR	MORT	LC50		4	d	0.0021		mg/L	100	9479
Endosulfan	Pimephales promelas, Fathead minnow	MOR	MOR	MORT	LC50		4	d	0.00075		mg/L	100	9479
Endosulfan	Pimephales promelas, Fathead minnow	MOR	MOR	MORT	LC50		4	d	0.00157		mg/L	100	9479
Endosulfan	Pimephales promelas, Fathead minnow	MOR	MOR	MORT	LC50		4	d	0.0025		mg/L	100	9479
Endosulfan	Pimephales promelas, Fathead minnow	MOR	MOR	MORT	LC50		4	d	0.00029		mg/L	100	9479
Endosulfan	Pimephales promelas, Fathead minnow	MOR	MOR	MORT	LC50		4	d	0.0032		mg/L	100	9479
Endosulfan	Pimephales promelas, Fathead minnow	MOR	MOR	MORT	LC50		4	d	0.0012		mg/L	100	9479
Endosulfan	Poecilia reticulata, Guppy	MOR	MOR	MORT	LC50		2	d	0.0066		mg/L	100	10646

Table H-1. Freshwater Fish Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Poecilia reticulata, Guppy	MOR	MOR	MORT	LC50		1	d	0.0122		mg/L	100	10646
Endosulfan	Poecilia reticulata, Guppy	MOR	MOR	MORT	LC50		3	d	0.004		mg/L	100	10646
Endosulfan	Poecilia reticulata, Guppy	MOR	MOR	MORT	LC50		0.5	d	0.016		mg/L	100	10646
Endosulfan	Poecilia reticulata, Guppy	MOR	MOR	MORT	LC50		4	d	0.0027		mg/L	100	10646
Endosulfan	Poecilia reticulata, Guppy	MOR	MOR	MORT	LC50		2	d	0.007		mg/L	100	20421
Endosulfan	Rasbora heteromorpha, Harlequinfish, red rasbora	MOR	MOR	MORT	LC50		4	d	0.0002		mg/L	96.2	5850
Endosulfan	Salmo salar, Atlantic salmon	MOR	MOR	MORT	NR-ZERO			d	0.7		ppm	100	104113
Endosulfan	Salmo salar, Atlantic salmon	MOR	MOR	MORT	NR-ZERO			d	0.7		ppm	100	104113
Endosulfan	Schilbe mystus, Butter barbel, silver barbel	MOR	MOR	MORT	LC50	92	1	d	0.00511		mg/L	100	15049
Endosulfan	Synodontis sp., Catfish, squeaker	MOR	MOR	MORT	LC50	92	1	d	0.00557		mg/L	100	15049
Endosulfan	Tandanus tandanus, Catfish	MOR	MOR	MORT	NR-ZERO			d	1		mg/L	100	16425
Endosulfan	Tandanus tandanus, Catfish	MOR	MOR	MORT	NR-ZERO			d	0.000995		mg/L	100	81795
Endosulfan	Tilapia mossambica, Mozambique tilapia	MOR	MOR	MORT	LC50	1	7	d	0.0014		mg/L	100	5649
Endosulfan	Tilapia mossambica, Mozambique tilapia	MOR	MOR	MORT	LC50	1	2	d	0.0055		mg/L	100	9253
Endosulfan	Tilapia mossambica, Mozambique tilapia	MOR	MOR	MORT	LC50		4	d	0.006		mg/L	100	9391
Endosulfan	Tilapia mossambica, Mozambique tilapia	MOR	MOR	MORT	LC50		1	d	0.02		mg/L	100	9391
Endosulfan	Tilapia mossambica, Mozambique tilapia	MOR	MOR	MORT	LC50		2	d	0.012		mg/L	100	9391

Table H-1. Freshwater Fish Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Tilapia mossambica, Mozambique tilapia	MOR	MOR	MORT	LC50		3	d	0.007		mg/L	100	9391
Endosulfan	Tilapia nilotica, Nile tilapia	MOR	MOR	MORT	LC50		4	d	0.15		mg/L	5	3296
Endosulfan	Tilapia nilotica, Nile tilapia	MOR	MOR	MORT	LC50		2	d	0.0042		mg/L	35	3296
Endosulfan	Tilapia nilotica, Nile tilapia	MOR	MOR	MORT	LC50		1	d	0.19		mg/L	5	3296
Endosulfan	Tilapia nilotica, Nile tilapia	MOR	MOR	MORT	LC50		2	d	0.0049		mg/L	35	3296
Endosulfan	Tilapia nilotica, Nile tilapia	MOR	MOR	MORT	LC50		2	d	0.15		mg/L	5	3296
Endosulfan	Tilapia nilotica, Nile tilapia	MOR	MOR	MORT	NR-LETH			d	0.28		mg/L	5	3296
Endosulfan	Tilapia nilotica, Nile tilapia	MOR	MOR	MORT	LC50		4	d	0.0035		mg/L	35	3296
Endosulfan	Tilapia nilotica, Nile tilapia	MOR	MOR	MORT	NR-ZERO	2		d	0.09		mg/L	5	3296
Endosulfan	Tilapia nilotica, Nile tilapia	MOR	MOR	MORT	LC50		1	d	0.14		mg/L	5	3296
Endosulfan	Tilapia nilotica, Nile tilapia	MOR	MOR	MORT	NR-LETH	4		d	0.0063		mg/L	35	3296
Endosulfan	Tilapia nilotica, Nile tilapia	MOR	MOR	MORT	LC50		1	d	0.0053		mg/L	35	3296
Endosulfan	Tilapia nilotica, Nile tilapia	MOR	MOR	MORT	LC50	1	2	d	0.14		mg/L	5	3296
Endosulfan	Tilapia nilotica, Nile tilapia	MOR	MOR	MORT	LC50		1	d	0.0046		mg/L	35	3296
Endosulfan	Tilapia nilotica, Nile tilapia	MOR	MOR	MORT	LC50		4	d	0.14		mg/L	5	3296
Endosulfan	Tilapia nilotica, Nile tilapia	MOR	MOR	MORT	NR-ZERO			d	0.00196		mg/L	35	3296
Endosulfan	Tilapia nilotica, Nile tilapia	MOR	MOR	MORT	LC50		4	d	0.0035		mg/L	35	3296

Table H-1. Freshwater Fish Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Tilapia nilotica, Nile tilapia	MOR	MOR	MORT	LC50		2	d	0.00069		mg/L	100	20421
Endosulfan	Tilapia nilotica, Nile tilapia	MOR	MOR	MORT	LC50		1	d	0.051		mg/L	100	12022
Endosulfan	Tilapia nilotica, Nile tilapia	MOR	MOR	MORT	LC95		1	d	0.0913		mg/L	100	12022
Endosulfan	Tilapia sparrmanii, Banded bream	MOR	MOR	MORT	LC50		1	d	0.00735		mg/L	100	15049
Endosulfan	Tilapia nilotica, Nile tilapia	NOC	NOC	MULT	NOEC		4	d	0.0011		mg/L	35	3296
Endosulfan	Tilapia nilotica, Nile tilapia	NOC	NOC	MULT	NOEC		4	d	0.05		mg/L	5	3296
Endosulfan	Tilapia nilotica, Nile tilapia	NOC	NOC	MULT	NOEC		4	d	0.09		mg/L	5	3296
Endosulfan	Tilapia nilotica, Nile tilapia	NOC	NOC	MULT	NOEC		4	d	0.002		mg/L	35	3296
Endosulfan	Channa punctata, Snake-head catfish	PHY	PHY	LDPX	LOAEL		1	d	0.005		mg/L	100	61957
Endosulfan	Labeo rohita, Rohu	PHY	PHY	PERA	NOAEL	LOAEL	45	d	4.914E-05	9.828E-05	mg/L	35	68250
Endosulfan	Mystus vittatus, Striped catfish	PHY	PHY	FDCV	LOAEL		21	d	0.02926		mg/L	35	88262
Endosulfan	Oncorhynchus kisutch, Coho salmon, silver salmon	PHY	PHY	EPYR	NOAEL	LOAEL	0.01	d	0.0099	0.099	mg/L	99	89637
Endosulfan	Tilapia nilotica, Nile tilapia	PHY	IMM	PHAG	LOAEL		4	d	0.0014		mg/L	35	103202
Endosulfan	Oryzias latipes, Medaka, high-eyes	POP	POP	SEXR	LOAEL		150	d	0.00006		mg/L	100	89788
Endosulfan	Lepomis macrochirus, Bluegill	REP	REP	GMET	LOAEL		1	d	0.00025		mg/L	98	104730
Endosulfan	Melanotaenia fluviatilis, Crimson-spotted rainbowfish	REP	REP	TSPN	NOAEL		0.17	d	0.05		mg/L	100	103200
Endosulfan	Oryzias latipes, Medaka, high-eyes	REP	REP	PROG	NOAEL		>2	wph	0.001		mg/L	50	69838

Table H-1. Freshwater Fish Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Oryzias latipes, Medaka, high-eyes	REP	REP	PROG	NOAEL	LOAEL	>2	wph	0.0001	0.001	mg/L	50	69838

Table H-2. Freshwater invertebrate data from ECOTOX. Data are arranged in alphabetical order by Effect Group. The code list for ECOTOX can be found at: <http://cfpub.epa.gov/ecotox/blackbox/help/codelist.pdf>.

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	<i>Daphnia magna</i> , Water flea	ACC	ACC	RSDE	BCF		1	d	116.6		mg	100	65915
Endosulfan	<i>Daphnia magna</i> , Water flea	ACC	ACC	RSDE	BCF		1	d	2.8		mg	100	65915
Endosulfan	<i>Daphnia magna</i> , Water flea	ACC	ACC	RSDE	BCF		1	d	85.1		mg	100	65915
Endosulfan	<i>Procambarus clarkii</i> , Red swamp crayfish	ACC	ACC	GACC	BCF		56	d	0.057		mg/L	100	8340
Endosulfan	<i>Bellamya dissimilis</i> , Snail	BCM	BCM	GLYC	LOAEL		1	d	0.063		mg/L	35	91311
Endosulfan	<i>Coenagrion puella</i> , Azure damselfly	BCM	ENZ	ACHE	NOAEL	LOAEL	105	d	0.0017	0.0052	mg/L	>98.9	10327 5
Endosulfan	<i>Coenagrion puella</i> , Azure damselfly	BCM	ENZ	ACHE	NOAEL	LOAEL	1.25	d	0.00989	0.014835	mg/L	>98.9	10327 5
Endosulfan	<i>Corbicula striatella</i> , Clam	BCM	ENZ	AMYL	LOAEL		4	d	0.311		mg/L	100	76665
Endosulfan	<i>Daphnia magna</i> , Water flea	BCM	ENZ	CTLS	NOEC		2	d	0.796		mg/L	99.5	80944
Endosulfan	<i>Daphnia magna</i> , Water flea	BCM	BCM	TBAR	NOEC		2	d	0.597		mg/L	99.5	80944
Endosulfan	<i>Daphnia magna</i> , Water flea	BCM	ENZ	GSTR	LOEC		2	d	0.398		mg/L	99.5	80944
Endosulfan	<i>Daphnia magna</i> , Water flea	BCM	BCM	LPFS	LOEC		2	d	0.597		mg/L	99.5	80944
Endosulfan	<i>Daphnia magna</i> , Water flea	BCM	BCM	LIPD	NOEC		2	d	0.597		mg/L	99.5	80944

Table H-2. Freshwater Invertebrate Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	<i>Daphnia magna</i> , <i>Water flea</i>	BCM	ENZ	SODA	LOEC		2	d	0.199		mg/L	99.5	80944
Endosulfan	<i>Daphnia magna</i> , <i>Water flea</i>	BCM	BCM	LPFS	NOEC		2	d	0.398		mg/L	99.5	80944
Endosulfan	<i>Daphnia magna</i> , <i>Water flea</i>	BCM	ENZ	GSTR	NOEC		2	d	0.199		mg/L	99.5	80944
Endosulfan	<i>Laccotrephes maculatus</i> , <i>Small Water Scorpion</i>	BCM	BCM	FECO	NOAEL		45	d	0.004		mg/L	100	82094
Endosulfan	<i>Laccotrephes maculatus</i> , <i>Small Water Scorpion</i>	BCM	BCM	NACO	LOAEL		45	d	0.004		mg/L	100	82094
Endosulfan	<i>Macrobrachium malcolmsonii</i> , <i>Monsson River prawn</i>	BCM	BCM	HP70	LOAEL		2	d	0.000016		mg/L	35	80963
Endosulfan	<i>Macrobrachium malcolmsonii</i> , <i>Monsson River prawn</i>	BCM	ENZ	ACPH	LOEC		21	d	0.0000112		mg/L	35	10350 9
Endosulfan	<i>Macrobrachium malcolmsonii</i> , <i>Monsson River prawn</i>	BCM	ENZ	ACPH	LOEC		21	d	0.0000112		mg/L	35	10350 9
Endosulfan	<i>Macrobrachium malcolmsonii</i> , <i>Monsson River prawn</i>	BCM	ENZ	ACPH	LOEC		21	d	0.0000112		mg/L	35	10350 9
Endosulfan	<i>Macrobrachium malcolmsonii</i> , <i>Monsson River prawn</i>	BCM	ENZ	ACPH	LOEC		21	d	0.0000112		mg/L	35	10350 9
Endosulfan	<i>Macrobrachium malcolmsonii</i> , <i>Monsson River prawn</i>	BCM	ENZ	ALPH	LOEC		21	d	0.0000112		mg/L	35	10350 9
Endosulfan	<i>Macrobrachium malcolmsonii</i> , <i>Monsson River prawn</i>	BCM	ENZ	ALPH	LOEC		21	d	0.0000112		mg/L	35	10350 9
Endosulfan	<i>Macrobrachium malcolmsonii</i> , <i>Monsson River prawn</i>	BCM	ENZ	ALPH	LOEC		21	d	0.0000112		mg/L	35	10350 9
Endosulfan	<i>Macrobrachium malcolmsonii</i> , <i>Monsson River prawn</i>	BCM	ENZ	ALPH	LOEC		21	d	0.0000112		mg/L	35	10350 9
Endosulfan	<i>Macrobrachium malcolmsonii</i> , <i>Monsson River prawn</i>	BCM	BCM	PRCO	LOAEL		21	d	0.00000371		mg/L	35	10338 0
Endosulfan	<i>Macrobrachium malcolmsonii</i> , <i>Monsson River prawn</i>	BCM	ENZ	GSTR	LOAEL		1	d	0.0000106		Al mg	35	10320 9

Table H-2. Freshwater Invertebrate Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	<i>Macrobrachium malcolmsonii</i> , <i>Monsson River prawn</i>	BCM	BCM	TFAA	LOAEL		1	d	0.0000106		Al mg	35	10320 9
Endosulfan	<i>Pila globosa</i> , <i>Apple snail</i>	BCM	BCM	PRCO	LOAEL		2	d	0.42		mg/L	99	68344
Endosulfan	<i>Brachionus calyciflorus</i> , <i>Rotifer</i>	BEH	BEH	FLTR	EC50		0.21	d	2.96		mg/L	100	6725
Endosulfan	<i>Brachionus calyciflorus</i> , <i>Rotifer</i>	BEH	FDB	GFDB	EC50		0.21	d	3.11		mg/L	100	6725
Endosulfan	<i>Daphnia magna</i> , <i>Water flea</i>	BEH	FDB	GFDB	EC50		0.21	d	0.61		mg/L	100	4009
Endosulfan	<i>Daphnia magna</i> , <i>Water flea</i>	BEH	BEH	FLTR	EC50		0.21	d	0.44		mg/L	100	4009
Endosulfan	<i>Daphnia magna</i> , <i>Water flea</i>	BEH	FDB	FEFF	EC50		0.21	d	0.16557		mg/L	100	65915
Endosulfan	<i>Daphnia magna</i> , <i>Water flea</i>	BEH	FDB	FCNS	EC50		0.21	d	0.16644		mg/L	100	65915
Endosulfan	<i>Daphnia magna</i> , <i>Water flea</i>	BEH	FDB	FEFF	NOEC	LOEC	0.21	d	0.1	0.2	mg/L	100	65915
Endosulfan	<i>Palaemonetes argentinus</i> , <i>Caridean Shrimp</i>	BEH	BEH	ACTV	NOEC	LOEC	4	d	0.000976	0.000683 6	mg/L	35	10142 1
Endosulfan	<i>Chironomus tentans</i> , <i>Midge</i>	CEL	GEN	GEXP	NOAEL	LOAEL	1	d	0.0005	0.005	mg/L	100	90390
Endosulfan	<i>Macrobrachium malcolmsonii</i> , <i>Monsson River prawn</i>	CEL	GEN	DNAC	LOAEL		1	d	0.0000106		Al mg	35	10320 9
Endosulfan	<i>Chironomus tentans</i> , <i>Midge</i>	GRO	GRO	WGH T	NOAEL		2	d	0.05		mg/L	100	90390
Endosulfan	<i>Coenagrion puella</i> , <i>Azure damselfly</i>	GRO	DVP	DVLP	NOAEL		105	d	0.0052		mg/L	>98.9	10327 5
Endosulfan	<i>Coenagrion puella</i> , <i>Azure damselfly</i>	GRO	MPH	GMP H	NOAEL		105	d	0.0052		mg/L	>98.9	10327 5
Endosulfan	<i>Coenagrion puella</i> , <i>Azure damselfly</i>	GRO	GRO	GRRT	NOAEL		105	d	0.0052		mg/L	>98.9	10327 5
Endosulfan	<i>Coenagrion puella</i> , <i>Azure damselfly</i>	GRO	GRO	GRRT	NOAEL	LOAEL	7	d	0.004945	0.00989	mg/L	>98.9	10327 5

Table H-2. Freshwater Invertebrate Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	<i>Culex quinquefasciatus</i> , <i>Southern house mosquito</i>	GRO	GRO	GRRT	LOAEL		1	d	0.35		mg/L	35	93239
Endosulfan	<i>Daphnia cephalata</i> , <i>Water flea</i>	GRO	GRO	GGR O	LOEC		14	d	0.0214		mg/L	100	17637
Endosulfan	<i>Daphnia cephalata</i> , <i>Water flea</i>	GRO	GRO	GGR O	LOEC		14	d	0.0921		mg/L	100	17637
Endosulfan	<i>Daphnia cephalata</i> , <i>Water flea</i>	GRO	GRO	GGR O	LOEC		14	d	0.022		mg/L	100	17637
Endosulfan	<i>Daphnia cephalata</i> , <i>Water flea</i>	GRO	GRO	GGR O	NOEC		14	d	0.049		mg/L	100	17637
Endosulfan	<i>Daphnia magna</i> , <i>Water flea</i>	GRO	GRO	GGR O	MATC		21	d	0.17		mg/L	100	13335
Endosulfan sulphate	<i>Daphnia magna</i> , <i>Water flea</i>	GRO	GRO	LGTH	LOAEL		21	d	0.0089884		mg/L	97.7	10320 1
Endosulfan sulphate	<i>Daphnia magna</i> , <i>Water flea</i>	GRO	DVP	ABNM	LOAEL		21	d	0.0089884		mg/L	97.7	10320 1
Endosulfan sulphate	<i>Daphnia magna</i> , <i>Water flea</i>	GRO	DVP	ABNM	LOAEL		4	d	0.0089884		mg/L	97.7	10320 1
Endosulfan	<i>Daphnia pulex</i> , <i>Water flea</i>	GRO	MPH	GMP H	NOAEL	LOAEL	1	ge	0.01	0.1	mg/L	100	62255
Endosulfan	<i>Daphnia pulex</i> , <i>Water flea</i>	GRO	GRO	LGTH	NOAEL	LOAEL	1	ge	0.1	0.2	mg/L	100	62255
Endosulfan	<i>Daphnia pulex</i> , <i>Water flea</i>	GRO	DVP	MATR	NOAEL		1	ge	0.2		mg/L	100	62255
Endosulfan	<i>Daphnia pulex</i> , <i>Water flea</i>	GRO	DVP	MATR	NOAEL		1	ge	0.2		mg/L	100	62255
Endosulfan	<i>Daphnia pulex</i> , <i>Water flea</i>	GRO	GRO	LGTH	NOAEL	LOAEL	1	ge	0.1	0.2	mg/L	100	62255
Endosulfan	<i>Daphnia pulex</i> , <i>Water flea</i>	GRO	MPH	GMP H	NOAEL		1	ge	0.2		mg/L	100	62255
Endosulfan	<i>Melanoides tuberculata</i> , <i>Snail</i>	GRO	GRO	GRRT	NOAEL		120	d	0.0448		mg/L	35	81381
Endosulfan	<i>Palaemonetes argentinus</i> , <i>Caridean Shrimp</i>	GRO	GRO	LGTH	LOEC		90	d	0.000122		mg/L	35	10142 1

Table H-2. Freshwater Invertebrate Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	<i>Thiara granifera</i> <i>Thiara granifera</i> , Snail	GRO	GRO	GRRT	LOAEL		120	d	0.00448		mg/L	35	81381
Endosulfan	<i>Tigriopus japonicus</i> , <i>Harpacticoid copepod</i>	GRO	DVP	NOR M	LOAEL		14	d	0.0000999		mg/L	99.9	10428 7
Endosulfan	<i>Tigriopus japonicus</i> , <i>Harpacticoid copepod</i>	GRO	DVP	NOR M	NOAEL		14	d	0.00999		mg/L	99.9	10428 7
Endosulfan	<i>Alonella sp.</i> , Water flea	MOR	MOR	MOR T	LC50		2	d	0.0002		mg/L	100	786
Endosulfan	<i>Aplexa hypnorum</i> , Snail	MOR	MOR	MOR T	LC50		4	d	1.89		mg/L	100	10417
Endosulfan	<i>Atalophlebia australis</i> , Mayfly	MOR	MOR	MOR T	LC50		3	d	0.0006		mg/L	96	20012
Endosulfan	<i>Atalophlebia australis</i> , Mayfly	MOR	MOR	MOR T	LC50		2	d	0.0007		mg/L	96	20012
Endosulfan	<i>Atalophlebia australis</i> , Mayfly	MOR	MOR	MOR T	LC50		1	d	0.001		mg/L	96	20012
Endosulfan	<i>Atalophlebia australis</i> , Mayfly	MOR	MOR	MOR T	LC50		1	d	0.0006		mg/L	96	20012
Endosulfan	<i>Atalophlebia australis</i> , Mayfly	MOR	MOR	MOR T	LC50		2	d	0.0006		mg/L	96	20012
Endosulfan	<i>Atalophlebia sp.</i> , Mayfly	MOR	MOR	MOR T	LC10		0.5	d	0.0042		mg/L	96	73404
Endosulfan	<i>Atalophlebia sp.</i> , Mayfly	MOR	MOR	MOR T	LC50		0.5	d	0.0262		mg/L	96	73404
Endosulfan	<i>Atalophlebia sp.</i> , Mayfly	MOR	MOR	MOR T	LC50		0.5	d	0.0204		mg/L	96	73404
Endosulfan	<i>Atalophlebia sp.</i> , Mayfly	MOR	MOR	MOR T	LC10		0.5	d	0.0095		mg/L	96	73404
Endosulfan	<i>Atalophlebia sp.</i> , Mayfly	MOR	MOR	MOR T	LC10		2	d	0.0063		mg/L	96	73404
Endosulfan	<i>Atalophlebia sp.</i> , Mayfly	MOR	MOR	MOR T	LC50		2	d	0.0136		mg/L	96	73404
Endosulfan	<i>Atalophlebia sp.</i> , Mayfly	MOR	MOR	MOR T	LC50		2	d	0.0123		mg/L	96	73404

Table H-2. Freshwater Invertebrate Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	<i>Atalophlebia sp., Mayfly</i>	MOR	MOR	MOR T	LC10		2	d	0.0082		mg/L	96	73404
Endosulfan	<i>Atalophlebia sp., Mayfly</i>	MOR	MOR	MOR T	LC10		4.5	d	0.0087		mg/L	96	73404
Endosulfan	<i>Atalophlebia sp., Mayfly</i>	MOR	MOR	MOR T	LC50		4.5	d	0.0354		mg/L	96	73404
Endosulfan	<i>Atalophlebia sp., Mayfly</i>	MOR	MOR	MOR T	LC50		0.5	d	0.0251		mg/L	96	73404
Endosulfan	<i>Atalophlebia sp., Mayfly</i>	MOR	MOR	MOR T	LC10		0.5	d	0.0018		mg/L	96	73404
Endosulfan	<i>Atalophlebia sp., Mayfly</i>	MOR	MOR	MOR T	LC10		0.5	d	0.0026		mg/L	96	73404
Endosulfan	<i>Atalophlebia sp., Mayfly</i>	MOR	MOR	MOR T	LC50		0.5	d	0.0142		mg/L	96	73404
Endosulfan	<i>Atalophlebia sp., Mayfly</i>	MOR	MOR	MOR T	LC50		2	d	0.0123		mg/L	96	73404
Endosulfan	<i>Atalophlebia sp., Mayfly</i>	MOR	MOR	MOR T	LC10		2	d	0.0062		mg/L	96	73404
Endosulfan	<i>Atalophlebia sp., Mayfly</i>	MOR	MOR	MOR T	LC10		2	d	0.0028		mg/L	96	73404
Endosulfan	<i>Atalophlebia sp., Mayfly</i>	MOR	MOR	MOR T	LC50		2	d	0.0152		mg/L	96	73404
Endosulfan	<i>Atalophlebia sp., Mayfly</i>	MOR	MOR	MOR T	LC50		2	d	0.0127		mg/L	96	73404
Endosulfan	<i>Atalophlebia sp., Mayfly</i>	MOR	MOR	MOR T	LC50		2	d	0.0159		mg/L	96	73404
Endosulfan	<i>Barytelphusa cunicularis, Crab</i>	MOR	MOR	MOR T	LC50		4	d	0.7875		mg/L	35	88807
Endosulfan	<i>Barytelphusa cunicularis, Crab</i>	MOR	MOR	MOR T	LC50		4	d	0.805		mg/L	35	88807
Endosulfan	<i>Barytelphusa cunicularis, Crab</i>	MOR	MOR	MOR T	LC50		4	d	0.777		mg/L	35	88807
Endosulfan	<i>Barytelphusa guerini, Freshwater crab</i>	MOR	MOR	MOR T	LC50		4	d	17.78		mg/L	100	14955

Table H-2. Freshwater Invertebrate Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	<i>Bellamya dissimilis</i> , <i>Snail</i>	MOR	MOR	MOR T	LC50		4	d	1.8		mg/L	100	17911
Endosulfan	<i>Brachionus calyciflorus</i> , <i>Rotifer</i>	MOR	MOR	MOR T	LC50		1	d	5.15		mg/L	100	3967
Endosulfan	<i>Brachionus calyciflorus</i> , <i>Rotifer</i>	MOR	MOR	MOR T	LC50		1	d	5.15		mg/L	100	5096
Endosulfan	<i>Brachionus calyciflorus</i> , <i>Rotifer</i>	MOR	MOR	HTCH	EC50		<=6.85	d	7.88		mg/L	100	5232
Endosulfan	<i>Brachionus calyciflorus</i> , <i>Rotifer</i>	MOR	MOR	MOR T	LC50		1	d	5.15		mg/L	100	5702
Endosulfan	<i>Caridina laevis</i> , <i>Smooth Caridina</i>	MOR	MOR	SURV	NOEC	LOEC	4	d	0.0001	0.0005	mg/L	100	10078 5
Endosulfan	<i>Caridina laevis</i> , <i>Smooth Caridina</i>	MOR	MOR	MOR T	LC50		4	d	0.00102		mg/L	100	10078 5
Endosulfan	<i>Cheumatopsyche sp.</i> , <i>Caddisfly</i>	MOR	MOR	MOR T	LC50		1	d	0.0008		mg/L	96	20012
Endosulfan	<i>Cheumatopsyche sp.</i> , <i>Caddisfly</i>	MOR	MOR	MOR T	LC50		2	d	0.0018		mg/L	96	20012
Endosulfan	<i>Cheumatopsyche sp.</i> , <i>Caddisfly</i>	MOR	MOR	MOR T	LC50		2	d	0.0004		mg/L	96	20012
Endosulfan	<i>Coenagrion puella</i> , <i>Azure damselfly</i>	MOR	MOR	MOR T	NOAEL		105	d	0.0052		mg/L	>98.9	10327 5
Endosulfan	<i>Crocothemis erythraea</i> , <i>Dragonfly</i>	MOR	MOR	MOR T	LC95		1	d	0.943		mg/L	100	12022
Endosulfan	<i>Crocothemis erythraea</i> , <i>Dragonfly</i>	MOR	MOR	MOR T	LC50		1	d	0.395		mg/L	100	12022
Endosulfan	<i>Culex fatigans</i> , <i>Mosquito</i>	MOR	MOR	MOR T	NR- LETH			d	0.5		mg/L	100	11147
Endosulfan	<i>Culex fatigans</i> , <i>Mosquito</i>	MOR	MOR	MOR T	LC50		2	d	0.15		mg/L	100	11147
Endosulfan	<i>Culex fatigans</i> , <i>Mosquito</i>	MOR	MOR	MOR T	LC50	1	1	d	0.135		mg/L	100	11147
Endosulfan	<i>Culex pipiens</i> , <i>Mosquito</i>	MOR	MOR	MOR T	LC50		1	d	0.066		mg/L	100	4431

Table H-2. Freshwater Invertebrate Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	<i>Culex quinquefasciatus</i> , <i>Southern house mosquito</i>	MOR	MOR	MOR T	LC50		1	d	0.0000021		mg/L	35	93239
Endosulfan	<i>Culex quinquefasciatus</i> , <i>Southern house mosquito</i>	MOR	MOR	MOR T	LC50		1	d	0.47215		mg/L	35	93239
Endosulfan	<i>Culex quinquefasciatus</i> , <i>Southern house mosquito</i>	MOR	MOR	MOR T	LC50		1	d	4.5087		mg/L	35	93239
Endosulfan	<i>Cypria sp.</i> , <i>Ostracod</i>	MOR	MOR	MOR T	LC50		2	d	0.0009		mg/L	100	786
Endosulfan II	<i>Daphnia carinata</i> , <i>Water flea</i>	MOR	MOR	MOR T	LC50		2	d	0.205		mg/L	100	16513
Endosulfan	<i>Daphnia longispina</i> , <i>Water flea</i>	MOR	MOR	MOR T	NR- LETH			d	0.001		mg/L	100	11147
Endosulfan	<i>Daphnia longispina</i> , <i>Water flea</i>	MOR	MOR	MOR T	LC50		1	d	0.0004		mg/L	100	11147
Endosulfan	<i>Daphnia longispina</i> , <i>Water flea</i>	MOR	MOR	MOR T	LC50	1	2	d	0.0003		mg/L	100	11147
Endosulfan I	<i>Daphnia magna</i> , <i>Water flea</i>	MOR	MOR	MOR T	LC50		2	d	1.1741		mg/L	99.5	87973
Endosulfan II	<i>Daphnia magna</i> , <i>Water flea</i>	MOR	MOR	MOR T	LC50		2	d	1.50936		mg/L	99.3	87973
Endosulfan	<i>Daphnia magna</i> , <i>Water flea</i>	MOR	MOR	MOR T	LC50		2	d	0.8316		mg/L	99	87973
Endosulfan sulphate	<i>Daphnia magna</i> , <i>Water flea</i>	MOR	MOR	MOR T	LC50		2	d	2.0776		mg/L	98	87973
Endosulfan	<i>Daphnia magna</i> , <i>Water flea</i>	MOR	MOR	MOR T	LC50		2	d	1.82		mg/L	40	87973
Endosulfan	<i>Daphnia magna</i> , <i>Water flea</i>	MOR	MOR	MOR T	LC50		2	d	1.92		mg/L	50	87973
Endosulfan	<i>Daphnia magna</i> , <i>Water flea</i>	MOR	MOR	MOR T	NR- ZERO			d	0.00057		mg/L	99	87973
Endosulfan	<i>Daphnia magna</i> , <i>Water flea</i>	MOR	MOR	MOR T	LC50		0.21	d	0.62		mg/L	100	4009

Table H-2. Freshwater Invertebrate Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	<i>Daphnia magna</i> , <i>Water flea</i>	MOR	MOR	MOR T	LC50		2	d	0.378		mg/L	100	9479
Endosulfan	<i>Daphnia magna</i> , <i>Water flea</i>	MOR	MOR	MOR T	LC50		2	d	0.266		mg/L	100	9479
Endosulfan	<i>Daphnia magna</i> , <i>Water flea</i>	MOR	MOR	MOR T	LC50		2	d	0.74		mg/L	100	9479
Endosulfan	<i>Daphnia magna</i> , <i>Water flea</i>	MOR	MOR	MOR T	LC50		2	d	0.342		mg/L	100	9479
Endosulfan	<i>Daphnia magna</i> , <i>Water flea</i>	MOR	MOR	MOR T	LC50		2	d	0.271		mg/L	100	9479
Endosulfan	<i>Daphnia magna</i> , <i>Water flea</i>	MOR	MOR	MOR T	LC50		2	d	0.158		mg/L	100	9479
Endosulfan	<i>Daphnia magna</i> , <i>Water flea</i>	MOR	MOR	MOR T	LC50		2	d	0.218		mg/L	100	9479
Endosulfan	<i>Daphnia magna</i> , <i>Water flea</i>	MOR	MOR	MOR T	LC50		2	d	0.63		mg/L	100	9479
Endosulfan	<i>Daphnia magna</i> , <i>Water flea</i>	MOR	MOR	MOR T	LC50		2	d	0.372		mg/L	100	9479
Endosulfan	<i>Daphnia magna</i> , <i>Water flea</i>	MOR	MOR	MOR T	LC50		2	d	0.328		mg/L	100	9479
Endosulfan	<i>Daphnia magna</i> , <i>Water flea</i>	MOR	MOR	MOR T	LC50		2	d	0.282		mg/L	100	9479
Endosulfan	<i>Daphnia magna</i> , <i>Water flea</i>	MOR	MOR	MOR T	LC50		2	d	0.25		mg/L	100	9479
Endosulfan	<i>Daphnia magna</i> , <i>Water flea</i>	MOR	MOR	MOR T	LC50		1	d	0.62		mg/L	100	13335
Endosulfan	<i>Daphnia magna</i> , <i>Water flea</i>	MOR	MOR	MOR T	MATC		21	d	0.17		mg/L	100	13335
Endosulfan	<i>Daphnia magna</i> , <i>Water flea</i>	MOR	MOR	MOR T	LC50		2	d	0.94525		mg/L	99.5	80944
Endosulfan	<i>Daphnia magna</i> , <i>Water flea</i>	MOR	MOR	MOR T	EC50		0.21	d	0.36633		mg/L	100	65915
Endosulfan	<i>Daphnia pulex</i> , <i>Water flea</i>	MOR	MOR	MOR T	NR- ZERO			ge	0.2		mg/L	100	62255

Table H-2. Freshwater Invertebrate Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	<i>Daphnia pulex</i> , Water flea	MOR	MOR	MOR T	NR-ZERO			ge	0.2		mg/L	100	62255
Endosulfan	<i>Daphnia pulex</i> , Water flea	MOR	MOR	MOR T	NOAEL	LOAEL	1	ge	0.01	0.1	mg/L	100	62255
Endosulfan	<i>Daphnia pulex</i> , Water flea	MOR	MOR	MOR T	NOAEL	¹ LOAEL	1	ge	0.01	0.1	mg/L	100	62255
Endosulfan	<i>Diaptomus sp.</i> , <i>Calanoid copepod</i>	MOR	MOR	MOR T	LC50		2	d	0.0006		mg/L	100	786
Endosulfan	<i>Eretes sticticus</i> , Beetle	MOR	MOR	MOR T	LC50		1	d	0.025		mg/L	100	5182
Endosulfan	<i>Eretes sticticus</i> , Beetle	MOR	MOR	MOR T	LC50		2	d	0.01		mg/L	100	5182
Endosulfan	<i>Eucyclops sp.</i> , <i>Cyclopoid copepod</i>	MOR	MOR	MOR T	LC50		2	d	0.0001		mg/L	100	786
Endosulfan I	<i>Hyalella azteca</i> , Scud	MOR	MOR	MOR T	LC50		4	d	0.0026865		mg/L	99.5	87973
Endosulfan II	<i>Hyalella azteca</i> , Scud	MOR	MOR	MOR T	LC50		4	d	0.151929		mg/L	99.3	87973
Endosulfan	<i>Hyalella azteca</i> , Scud	MOR	MOR	MOR T	LC50		4	d	0.005643		mg/L	99	87973
Endosulfan sulphate	<i>Hyalella azteca</i> , Scud	MOR	MOR	MOR T	LC50		4	d	0.005586		mg/L	98	87973
Endosulfan	<i>Hyalella azteca</i> , Scud	MOR	MOR	MOR T	LC50		4	d	0.0115		mg/L	40	87973
Endosulfan	<i>Hyalella azteca</i> , Scud	MOR	MOR	MOR T	LC50		4	d	0.0059		mg/L	50	87973
Endosulfan	<i>Hyalella azteca</i> , Scud	MOR	MOR	MOR T	NR-ZERO			d	0.00057		mg/L	99	87973
Endosulfan	<i>Hydra viridissima</i> , <i>Hydra</i>	MOR	MOR	MOR T	LC50		4	d	0.67		mg/L	92.6	20380
Endosulfan	<i>Hydra vulgaris</i> , <i>Hydra</i>	MOR	MOR	MOR T	LC50	⁴	4	d	0.81		mg/L	92.6	20380
Endosulfan	<i>Jappa kutera</i> , Mayfly	MOR	MOR	MOR T	LC50		3	d	0.0019		mg/L	96	20012

Table H-2. Freshwater Invertebrate Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	<i>Jappa kutera, Mayfly</i>	MOR	MOR	MOR T	LC50		1	d	0.002		mg/L	96	20012
Endosulfan	<i>Jappa kutera, Mayfly</i>	MOR	MOR	MOR T	LC50		2	d	0.0013		mg/L	96	20012
Endosulfan	<i>Jappa kutera, Mayfly</i>	MOR	MOR	MOR T	LC50		3	d	0.001		mg/L	96	20012
Endosulfan	<i>Jappa kutera, Mayfly</i>	MOR	MOR	MOR T	LC50		4	d	0.0012		mg/L	96	20012
Endosulfan	<i>Jappa kutera, Mayfly</i>	MOR	MOR	MOR T	LC50		2	d	0.002		mg/L	96	20012
Endosulfan	<i>Jappa kutera, Mayfly</i>	MOR	MOR	MOR T	LC50		1	d	0.0036		mg/L	96	20012
Endosulfan	<i>Jappa kutera, Mayfly</i>	MOR	MOR	MOR T	LC01		0.5	d	0.00005		mg/L	100	10321 3
Endosulfan	<i>Jappa kutera, Mayfly</i>	MOR	MOR	MOR T	LC50		2	d	0.0031		mg/L	100	10321 3
Endosulfan I	<i>Jappa kutera, Mayfly</i>	MOR	MOR	MOR T	NOEC	LOEC	4	d	0.0003	0.0003	mg/L	100	62479
Endosulfan sulphate	<i>Jappa kutera, Mayfly</i>	MOR	MOR	MOR T	NOEC	LOEC	4	d	0.0003	0.0003	mg/L	100	62479
Endosulfan	<i>Jappa kutera, Mayfly</i>	MOR	MOR	MOR T	NOEC	LOEC	4	d	0.0003	0.0003	mg/L	100	62479
Endosulfan II	<i>Jappa kutera, Mayfly</i>	MOR	MOR	MOR T	NOEC	LOEC	4	d	0.0003	0.0009	mg/L	100	62479
Endosulfan II	<i>Jappa kutera, Mayfly</i>	MOR	MOR	MOR T	LC50		4	d	0.0023		mg/L	100	62479
Endosulfan I	<i>Jappa kutera, Mayfly</i>	MOR	MOR	MOR T	LC50		4	d	0.0007		mg/L	100	62479
Endosulfan sulphate	<i>Jappa kutera, Mayfly</i>	MOR	MOR	MOR T	LC50		4	d	0.0012		mg/L	100	62479
Endosulfan	<i>Jappa kutera, Mayfly</i>	MOR	MOR	MOR T	LC50		4	d	0.0018		mg/L	100	62479
Endosulfan	<i>Lamellidens corrianus, Bivalve</i>	MOR	MOR	MOR T	LC50		4	d	12.25		mg/L	35	4946

Table H-2. Freshwater Invertebrate Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	<i>Lamellidens marginalis</i> , Mussel	MOR	MOR	MOR T	LC10		2	d	18.97		mg/L	100	126
Endosulfan	<i>Lamellidens marginalis</i> , Mussel	MOR	MOR	MOR T	LC25		2	d	28.14		mg/L	100	126
Endosulfan	<i>Lamellidens marginalis</i> , Mussel	MOR	MOR	MOR T	LC50		2	d	43.41		mg/L	100	126
Endosulfan	<i>Lamellidens marginalis</i> , Mussel	MOR	MOR	MOR T	LC75		2	d	66.95		mg/L	100	126
Endosulfan	<i>Lamellidens marginalis</i> , Mussel	MOR	MOR	MOR T	LC90		2	d	99.42		mg/L	100	126
Endosulfan	<i>Lanistes carinatus</i> , Snail	MOR	MOR	MOR T	LC50		1	d	3.4		mg/L	100	12022
Endosulfan	<i>Lanistes carinatus</i> , Snail	MOR	MOR	MOR T	LC95		1	d	5.17		mg/L	100	12022
Endosulfan	<i>Lymnaea luteola</i> , Pond snail	MOR	MOR	MOR T	LC50		4	d	0.06		mg/L	100	10372 3
Endosulfan	<i>Lymnaea natalensis</i> , Pond snail	MOR	MOR	MOR T	LC50		1	d	5.26		mg/L	100	11147
Endosulfan	<i>Lymnaea natalensis</i> , Pond snail	MOR	MOR	MOR T	LC50		2	d	4.37		mg/L	100	11147
Endosulfan	<i>Macrobrachium malcolmsonii</i> , Monsson River prawn	MOR	MOR	MOR T	NR-ZERO			d	0.00032		mg/L	35	80963
Endosulfan	<i>Macrobrachium rosenbergii</i> , Giant river prawn	MOR	MOR	MOR T	LC50		4	d	0.00093		mg/L	100	61993
Endosulfan	<i>Macrobrachium rosenbergii</i> , Giant river prawn	MOR	MOR	MOR T	LC50	2	4	d	0.0002		mg/L	100	61993
Endosulfan	<i>Moina macrocopa</i> , Water flea	MOR	MOR	MOR T	NR-ZERO	NR-LETH	1	d	0.5	2.64	mg/L	33	10320 8
Endosulfan	<i>Moina macrocopa</i> , Water flea	MOR	MOR	MOR T	LC50		1	d	3.34		mg/L	33	10320 8
Endosulfan	<i>Moina macrocopa</i> , Water flea	MOR	MOR	MOR T	LC50		2	d	0.16		mg/L	33	10320 8
Endosulfan	<i>Moina macrocopa</i> , Water flea	MOR	MOR	MOR T	NR-ZERO	NR-LETH	2	d	0.002	1.155	mg/L	33	10320 8

Table H-2. Freshwater Invertebrate Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	<i>Moina macrocopa</i> , <i>Water flea</i>	MOR	MOR	MOR T	NOEC	LOEC	2	d	0.002	0.0165	mg/L	33	10320 8
Endosulfan	<i>Moina macrocopa</i> , <i>Water flea</i>	MOR	MOR	MOR T	LT50		~12.0	d	0.0004		mg/L	33	10320 8
Endosulfan	<i>Moina macrocopa</i> , <i>Water flea</i>	MOR	MOR	MOR T	LT50		8.0 TO 9.0	d	0.002		mg/L	33	10320 8
Endosulfan	<i>Moina micrura</i> , <i>Water flea</i>	MOR	MOR	MOR T	LC50		1	d	0.0162		mg/L	90	87649
Endosulfan	<i>Oziotelphusa senex</i> , <i>Crab</i>	MOR	MOR	MOR T	LC50		2	d	6.2		mg/L	100	18025
Endosulfan	<i>Palaemonetes argentinus</i> , <i>Caridean Shrimp</i>	MOR	MOR	MOR T	NR- LETH			d	0.015625		mg/L	35	10142 1
Endosulfan	<i>Palaemonetes argentinus</i> , <i>Caridean Shrimp</i>	MOR	MOR	MOR T	LC50		4	d	0.00628		mg/L	35	10142 1
Endosulfan	<i>Palaemonetes paludosus</i> , <i>Riverine grass shrimp</i>	MOR	MOR	MOR T	NR- LETH	3		d	0.001		mg/L	100	93458
Endosulfan	<i>Palaemonetes paludosus</i> , <i>Riverine grass shrimp</i>	MOR	MOR	MOR T	NR- LETH	4		d	0.001		mg/L	100	93458
Endosulfan	<i>Palaemonetes paludosus</i> , <i>Riverine grass shrimp</i>	MOR	MOR	MOR T	NR- ZERO	2		d	0.0000005		mg/L	100	93458
Endosulfan	<i>Palaemonetes paludosus</i> , <i>Riverine grass shrimp</i>	MOR	MOR	MOR T	LC50	2	1	d	0.00047		mg/L	100	93458
Endosulfan	<i>Palaemonetes paludosus</i> , <i>Riverine grass shrimp</i>	MOR	MOR	MOR T	LC50		2	d	0.00037		mg/L	100	93458
Endosulfan	<i>Palaemonetes paludosus</i> , <i>Riverine grass shrimp</i>	MOR	MOR	MOR T	LC50		3	d	0.00031		mg/L	100	93458
Endosulfan	<i>Palaemonetes paludosus</i> , <i>Riverine grass shrimp</i>	MOR	MOR	MOR T	LC50		4	d	0.00024		mg/L	100	93458
Endosulfan	<i>Paramelita nigroculus</i> , <i>Amphipod</i>	MOR	MOR	MOR T	LC50		1	d	0.0192		mg/L	100	87478
Endosulfan	<i>Paratya australiensis</i> , <i>Shrimp</i>	MOR	MOR	MOR T	LC01		2	d	0.00003		mg/L	100	10321 3

Table H-2. Freshwater Invertebrate Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	<i>Paratya australiensis</i> , <i>Shrimp</i>	MOR	MOR	MOR T	LC50		2	d	0.00096		mg/L	100	10321 3
Endosulfan	<i>Paratya australiensis</i> , <i>Shrimp</i>	MOR	MOR	MOR T	LC01		2	d	0.00006		mg/L	100	10321 3
Endosulfan	<i>Paratya australiensis</i> , <i>Shrimp</i>	MOR	MOR	MOR T	LC50		2	d	0.00051		mg/L	100	10321 3
Endosulfan	<i>Procambarus clarkii</i> , <i>Red swamp crayfish</i>	MOR	MOR	MOR T	LC50		4	d	0.024		mg/L	100	12802
Endosulfan	<i>Pseudagrion</i> sp., <i>Dragonfly</i>	MOR	MOR	MOR T	LC50		1	d	0.046		mg/L	100	12022
Endosulfan	<i>Pseudagrion</i> sp., <i>Dragonfly</i>	MOR	MOR	MOR T	LC95		1	d	0.0975		mg/L	100	12022
Endosulfan	<i>Spicodiantomus</i> <i>chilospinus</i> , <i>Calanoid</i> <i>copepod</i>	MOR	MOR	MOR T	LC50		2	d	0.04		mg/L	100	5264
Endosulfan	<i>Spicodiantomus</i> <i>chilospinus</i> , <i>Calanoid</i> <i>copepod</i>	MOR	MOR	MOR T	LC50		1	d	0.05		mg/L	100	5264
Endosulfan	<i>Tigriopus japonicus</i> , <i>Harpacticoid copepod</i>	MOR	MOR	MOR T	LC10		4	d	0.03996		mg/L	99.9	10428 7
Endosulfan	<i>Tigriopus japonicus</i> , <i>Harpacticoid copepod</i>	MOR	MOR	MOR T	LC50		4	d	0.06993		mg/L	99.9	10428 7
Endosulfan	<i>Tigriopus japonicus</i> , <i>Harpacticoid copepod</i>	MOR	MOR	SURV	NOAEL		14	d	0.00999		mg/L	99.9	10428 7
Endosulfan	<i>Tigriopus japonicus</i> , <i>Harpacticoid copepod</i>	MOR	MOR	SURV	NOAEL		14	d	0.00999		mg/L	99.9	10428 7
Endosulfan	<i>Atalophlebia australis</i> , <i>Mayfly</i>	PHY	ITX	IMBL	EC50		2	d	0.0006		mg/L	96	20012
Endosulfan	<i>Atalophlebia australis</i> , <i>Mayfly</i>	PHY	ITX	IMBL	LOEC		1	d	0.001		mg/L	96	20012
Endosulfan	<i>Atalophlebia australis</i> , <i>Mayfly</i>	PHY	ITX	IMBL	NOEC		2	d	0.0003		mg/L	96	20012
Endosulfan	<i>Atalophlebia australis</i> , <i>Mayfly</i>	PHY	ITX	IMBL	NOEC		1	d	0.0003		mg/L	96	20012
Endosulfan	<i>Atalophlebia australis</i> , <i>Mayfly</i>	PHY	ITX	IMBL	EC50		1	d	0.0006		mg/L	96	20012

Table H-2. Freshwater Invertebrate Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	<i>Atalophlebia australis, Mayfly</i>	PHY	ITX	IMBL	NOEC		1	d	0.0003		mg/L	96	20012
Endosulfan	<i>Atalophlebia australis, Mayfly</i>	PHY	ITX	IMBL	NOEC		2	d	0.0003		mg/L	96	20012
Endosulfan	<i>Atalophlebia australis, Mayfly</i>	PHY	ITX	IMBL	LOEC		1	d	0.001		mg/L	96	20012
Endosulfan	<i>Atalophlebia australis, Mayfly</i>	PHY	ITX	IMBL	LOEC		2	d	0.001		mg/L	96	20012
Endosulfan	<i>Atalophlebia australis, Mayfly</i>	PHY	ITX	IMBL	LOEC		3	d	0.001		mg/L	96	20012
Endosulfan	<i>Atalophlebia australis, Mayfly</i>	PHY	ITX	IMBL	NOEC		3	d	0.0003		mg/L	96	20012
Endosulfan	<i>Atalophlebia australis, Mayfly</i>	PHY	ITX	IMBL	EC50		1	d	0.0005		mg/L	96	20012
Endosulfan	<i>Atalophlebia australis, Mayfly</i>	PHY	ITX	IMBL	EC50		2	d	0.0006		mg/L	96	20012
Endosulfan	<i>Atalophlebia australis, Mayfly</i>	PHY	ITX	IMBL	EC50		3	d	0.0006		mg/L	96	20012
Endosulfan	<i>Atalophlebia australis, Mayfly</i>	PHY	ITX	IMBL	LOEC		2	d	0.001		mg/L	96	20012
Endosulfan	<i>Cheumatopsyche sp., Caddisfly</i>	PHY	ITX	IMBL	LOEC		2	d	0.0012		mg/L	96	20012
Endosulfan	<i>Cheumatopsyche sp., Caddisfly</i>	PHY	ITX	IMBL	NOEC		2	d	0.0006		mg/L	96	20012
Endosulfan	<i>Cheumatopsyche sp., Caddisfly</i>	PHY	ITX	IMBL	EC50		2	d	0.001		mg/L	96	20012
Endosulfan	<i>Cheumatopsyche sp., Caddisfly</i>	PHY	ITX	IMBL	LOEC		2	d	0.0003		mg/L	96	20012
Endosulfan	<i>Cheumatopsyche sp., Caddisfly</i>	PHY	ITX	IMBL	LOEC		1	d	0.0012		mg/L	96	20012
Endosulfan	<i>Cheumatopsyche sp., Caddisfly</i>	PHY	ITX	IMBL	NOEC		2	d	0.0002		mg/L	96	20012
Endosulfan	<i>Cheumatopsyche sp., Caddisfly</i>	PHY	ITX	IMBL	NOEC		1	d	0.0003		mg/L	96	20012

Table H-2. Freshwater Invertebrate Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	<i>Cheumatopsyche sp., Caddisfly</i>	PHY	ITX	IMBL	LOEC		1	d	0.0006		mg/L	96	20012
Endosulfan	<i>Cheumatopsyche sp., Caddisfly</i>	PHY	ITX	IMBL	EC50		1	d	0.0005		mg/L	96	20012
Endosulfan	<i>Cheumatopsyche sp., Caddisfly</i>	PHY	ITX	IMBL	EC50		2	d	0.0004		mg/L	96	20012
Endosulfan	<i>Cheumatopsyche sp., Caddisfly</i>	PHY	ITX	IMBL	NOEC		1	d	0.0006		mg/L	96	20012
Endosulfan	<i>Daphnia carinata, Water flea</i>	PHY	ITX	IMBL	EC50		2	d	0.18		mg/L	100	5194
Endosulfan	<i>Daphnia magna, Water flea</i>	PHY	ITX	IMBL	EC50		0.25	d	3.5		mg/L	100	17456
Endosulfan	<i>Daphnia magna, Water flea</i>	PHY	ITX	IMBL	EC50		0.08	d	35		mg/L	100	17456
Endosulfan	<i>Daphnia magna, Water flea</i>	PHY	ITX	IMBL	EC50		0.17	d	35		mg/L	100	17456
Endosulfan	<i>Daphnia magna, Water flea</i>	PHY	ITX	IMBL	EC50		1	d	1		mg/L	100	17456
Endosulfan	<i>Jappa kutera, Mayfly</i>	PHY	ITX	IMBL	NOEC		1	d	0.0001		mg/L	96	20012
Endosulfan	<i>Jappa kutera, Mayfly</i>	PHY	ITX	IMBL	NOEC		2	d	0.0024		mg/L	96	20012
Endosulfan	<i>Jappa kutera, Mayfly</i>	PHY	ITX	IMBL	LOEC		1	d	0.0012		mg/L	96	20012
Endosulfan	<i>Jappa kutera, Mayfly</i>	PHY	ITX	IMBL	LOEC		3	d	0.001		mg/L	96	20012
Endosulfan	<i>Jappa kutera, Mayfly</i>	PHY	ITX	IMBL	NOEC		4	d	0.0003		mg/L	96	20012
Endosulfan	<i>Jappa kutera, Mayfly</i>	PHY	ITX	IMBL	NOEC		1	d	0.0006		mg/L	96	20012
Endosulfan	<i>Jappa kutera, Mayfly</i>	PHY	ITX	IMBL	NOEC		3	d	0.0003		mg/L	96	20012
Endosulfan	<i>Jappa kutera, Mayfly</i>	PHY	ITX	IMBL	LOEC		4	d	0.001		mg/L	96	20012

Table H-2. Freshwater Invertebrate Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	<i>Jappa kutera, Mayfly</i>	PHY	ITX	IMBL	NOEC		2	d	0.0003		mg/L	96	20012
Endosulfan	<i>Jappa kutera, Mayfly</i>	PHY	ITX	IMBL	EC50		3	d	0.0011		mg/L	96	20012
Endosulfan	<i>Jappa kutera, Mayfly</i>	PHY	ITX	IMBL	EC50		1	d	0.0012		mg/L	96	20012
Endosulfan	<i>Jappa kutera, Mayfly</i>	PHY	ITX	IMBL	LOEC		2	d	0.001		mg/L	96	20012
Endosulfan	<i>Jappa kutera, Mayfly</i>	PHY	ITX	IMBL	NOEC		3	d	0.0006		mg/L	96	20012
Endosulfan	<i>Jappa kutera, Mayfly</i>	PHY	ITX	IMBL	EC50		2	d	0.0011		mg/L	96	20012
Endosulfan	<i>Jappa kutera, Mayfly</i>	PHY	ITX	IMBL	NOEC		1	d	0.0024		mg/L	96	20012
Endosulfan	<i>Jappa kutera, Mayfly</i>	PHY	ITX	IMBL	EC50		2	d	0.0011		mg/L	96	20012
Endosulfan	<i>Jappa kutera, Mayfly</i>	PHY	ITX	IMBL	LOEC		2	d	0.0012		mg/L	96	20012
Endosulfan	<i>Jappa kutera, Mayfly</i>	PHY	ITX	IMBL	EC50		4	d	0.0008		mg/L	96	20012
Endosulfan	<i>Jappa kutera, Mayfly</i>	PHY	ITX	IMBL	LOEC		1	d	0.0003		mg/L	96	20012
Endosulfan	<i>Jappa kutera, Mayfly</i>	PHY	ITX	IMBL	EC50		3	d	0.001		mg/L	96	20012
Endosulfan	<i>Jappa kutera, Mayfly</i>	PHY	ITX	IMBL	EC50		1	d	0.001		mg/L	96	20012
Endosulfan	<i>Jappa kutera, Mayfly</i>	PHY	ITX	IMBL	NOEC		2	d	0.0006		mg/L	96	20012
Endosulfan	<i>Jappa kutera, Mayfly</i>	PHY	ITX	IMBL	LOEC		3	d	0.0012		mg/L	96	20012
Endosulfan	<i>Lamellidens corrianus, Bivalve</i>	PHY	PHY	OXYG	LOAEL		1	d	6.125		mg/L	35	4946
Endosulfan	<i>Lamellidens corrianus, Bivalve</i>	PHY	PHY	OXYG	LOAEL		2	d	6.125		mg/L	35	4946

Table H-2. Freshwater Invertebrate Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	<i>Lamellidens corrianus, Bivalve</i>	PHY	PHY	OXYG	NOAEL		3	d	6.125		mg/L	35	4946
Endosulfan	<i>Lamellidens corrianus, Bivalve</i>	PHY	PHY	OXYG	LOAEL		4	d	6.125		mg/L	35	4946
Endosulfan	<i>Austrophlebia sp., Dragonfly</i>	POP	POP	ABND	NOEC	LOEC	2	d	0.00687	0.0307	mg/L	96	72555
Endosulfan	<i>Brachionus calyciflorus, Rotifer</i>	POP	POP	PGRT	NOEC	LOEC	3	d	3.465	6.93	mg/L	>=99	103210
Endosulfan	<i>Brachionus calyciflorus, Rotifer</i>	POP	POP	PGRT	EC50		3	d	4.1679		mg/L	>=99	103210
Endosulfan	<i>Ceriodaphnia sp., Water flea</i>	POP	POP	ABND	NOAEL	LOAEL	7	d	0.01	0.05	mg/L	100	104110
Endosulfan	<i>Cloeon sp., Mayfly</i>	POP	POP	ABND	NOAEL		6	d	0.001		mg/L	96	72555
Endosulfan	<i>Cyprretta sp., Ostracod</i>	POP	POP	ABND	LOAEL		42	d	0.001		mg/L	100	104110
Endosulfan	<i>Daphnia pulex, Water flea</i>	POP	POP	IRIN	NOAEL	LOAEL	1	ge	0.01	0.1	mg/L	100	62255
Endosulfan	<i>Daphnia pulex, Water flea</i>	POP	POP	IRIN	NOAEL	LOAEL	1	ge	0.01	0.1	mg/L	100	62255
Endosulfan	<i>Ecnomus sp., Caddisfly</i>	POP	POP	ABND	NOAEL	LOAEL	2.5	d	0.00869	0.04887	mg/L	96	72555
Endosulfan	<i>Eucypris sp., Ostracod</i>	POP	POP	ABND	NOAEL	LOAEL	42	d	0.001	0.01	mg/L	100	104110
Endosulfan	<i>Invertebrates Invertebrates, NR</i>	POP	POP	DRFT	NOEC		1.5	d	0.00614		mg/L	96	62267
Endosulfan	<i>Jappa kutera, Mayfly</i>	POP	POP	DRFT	NOEC	LOEC	1.5	d	0.00107	0.00614	mg/L	96	62267
Endosulfan	<i>Jappa kutera, Mayfly</i>	POP	POP	ABND	NOEC	LOEC	0.5	d	0.00869	0.04887	mg/L	96	72555
Endosulfan	<i>Jappa kutera, Mayfly</i>	POP	POP	ABND	NOEC	LOEC	2	d	0.001	0.00687	mg/L	96	72555
Endosulfan	<i>Melanoides tuberculata, Snail</i>	POP	POP	SZDS	NOAEL	LOAEL	120	d	0.00448	0.0448	mg/L	35	81381

Table H-2. Freshwater Invertebrate Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	<i>Micronecta sp., Lesser water boatmen</i>	POP	POP	DRFT	NOEC		1.5	d	0.00614		mg/L	96	62267
Endosulfan	<i>Simocephalus exspinosus, Cladoceran</i>	POP	POP	ABND	NOAEL		42	d	0.05		mg/L	100	104110
Endosulfan	<i>Tasmanocoenis sp., Mayfly</i>	POP	POP	DRFT	NOEC		1.5	d	0.00614		mg/L	96	62267
Endosulfan	<i>Thiara granifera Thiara granifera, Snail</i>	POP	POP	SZDS	NOAEL	LOAEL	120	d	0.00448	0.0448	mg/L	35	81381
Endosulfan	<i>Tigriopus japonicus, Harpacticoid copepod</i>	POP	POP	SEXR	NOAEL		14	d	0.00999		mg/L	99.9	104287
Endosulfan	<i>Tigriopus japonicus, Harpacticoid copepod</i>	POP	POP	SEXR	NOAEL		14	d	0.00999		mg/L	99.9	104287
Endosulfan	<i>Triplectides sp., Long-horn Caddisfly</i>	POP	POP	DRFT	NOEC	LOEC	1.5	d	0.00107	0.00614	mg/L	96	62267
Endosulfan	<i>Brachionus calyciflorus, Rotifer</i>	REP	REP	FERT	NOEC	LOEC	3	d	0.86625	1.7325	mg/L	>=99	103210
Endosulfan	<i>Brachionus calyciflorus, Rotifer</i>	REP	REP	FERT	EC50		3	d	1.7919		mg/L	>=99	103210
Endosulfan	<i>Brachionus calyciflorus, Rotifer</i>	REP	REP	PRFM	NOEC	LOEC	3	d	3.465	6.93	mg/L	>=99	103210
Endosulfan	<i>Brachionus calyciflorus, Rotifer</i>	REP	REP	PRFM	EC50		3	d	5.6727		mg/L	>=99	103210
Endosulfan	<i>Brachionus calyciflorus, Rotifer</i>	REP	REP	GREP	EC50		<=10	d	1		mg/L	100	5232
Endosulfan	<i>Ceriodaphnia dubia, Water flea</i>	REP	REP	GREP	MATC		14	d	0.0141		mg/L	100	13678
Endosulfan	<i>Ceriodaphnia dubia, Water flea</i>	REP	REP	GREP	LOEC		14	d	0.02		mg/L	100	13678
Endosulfan	<i>Ceriodaphnia dubia, Water flea</i>	REP	REP	GREP	EC50		14	d	0.0264		mg/L	100	13678
Endosulfan	<i>Ceriodaphnia dubia, Water flea</i>	REP	REP	GREP	NOEC		14	d	0.01		mg/L	100	13678
Endosulfan	<i>Daphnia cephalata, Water flea</i>	REP	REP	GREP	NOEC		14	d	0.049		mg/L	100	17637

Table H-2. Freshwater Invertebrate Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	<i>Daphnia cephalata</i> , <i>Water flea</i>	REP	REP	GREP	NOEC		14	d	0.049		mg/L	100	17637
Endosulfan	<i>Daphnia magna</i> , <i>Water flea</i>	REP	REP	GREP	MATC		21	d	0.17		mg/L	100	13335
Endosulfan sulphate	<i>Daphnia magna</i> , <i>Water flea</i>	REP	REP	PROG	LOAEL		21	d	0.0089884		mg/L	97.7	103201
Endosulfan sulphate	<i>Daphnia magna</i> , <i>Water flea</i>	REP	REP	SEXR	EC50		>=8	d	0.4255812		mg/L	97.7	103201
Endosulfan sulphate	<i>Daphnia magna</i> , <i>Water flea</i>	REP	REP	SEXR	NOAEL	LOAEL	>=8	d	0.0447466	0.0895909	mg/L	97.7	103201
Endosulfan sulphate	<i>Daphnia magna</i> , <i>Water flea</i>	REP	REP	SEXR	NOAEL	LOAEL	>=8	d	0.0447466	0.0895909	mg/L	97.7	103201
Endosulfan sulphate	<i>Daphnia magna</i> , <i>Water flea</i>	REP	REP	SEXR	EC50		>=8	d	0.4427764		mg/L	97.7	103201
Endosulfan	<i>Daphnia pulex</i> , <i>Water flea</i>	REP	REP	CLPD	NOAEL	LOAEL	1	ge	0.1	0.2	mg/L	100	62255
Endosulfan	<i>Daphnia pulex</i> , <i>Water flea</i>	REP	REP	CLPD	NOAEL	LOAEL	1	ge	0.1	0.2	mg/L	100	62255
Endosulfan	<i>Hydra viridissima</i> , <i>Hydra</i>	REP	REP	CLUB	NOEC		0.08	d	0.00003		mg/L	92.6	20380
Endosulfan	<i>Hydra viridissima</i> , <i>Hydra</i>	REP	REP	CLUB	LOEC		0.04	d	0.00006		mg/L	92.6	20380
Endosulfan	<i>Hydra viridissima</i> , <i>Hydra</i>	REP	REP	CLUB	NOEC		0.04	d	0.00003		mg/L	92.6	20380
Endosulfan	<i>Hydra viridissima</i> , <i>Hydra</i>	REP	REP	CLUB	LOEC		6	d	0.00008		mg/L	92.6	20380
Endosulfan	<i>Hydra viridissima</i> , <i>Hydra</i>	REP	REP	CLUB	NOEC		6	d	0.00006		mg/L	92.6	20380
Endosulfan	<i>Hydra viridissima</i> , <i>Hydra</i>	REP	REP	CLUB	EC50		0.08	d	0.6		mg/L	92.6	20380
Endosulfan	<i>Hydra viridissima</i> , <i>Hydra</i>	REP	REP	CLUB	EC50		0.04	d	0.92		mg/L	92.6	20380
Endosulfan	<i>Hydra viridissima</i> , <i>Hydra</i>	REP	REP	CLUB	LOEC		0.08	d	0.00006		mg/L	92.6	20380

Table H-2. Freshwater Invertebrate Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	<i>Hydra vulgaris, Hydra</i>	REP	REP	CLUB	NOEC		0.08	d	0.00002		mg/L	92.6	20380
Endosulfan	<i>Hydra vulgaris, Hydra</i>	REP	REP	CLUB	NOEC		0.04	d	0.00002		mg/L	92.6	20380
Endosulfan	<i>Hydra vulgaris, Hydra</i>	REP	REP	CLUB	LOEC		0.04	d	0.00004		mg/L	92.6	20380
Endosulfan	<i>Hydra vulgaris, Hydra</i>	REP	REP	CLUB	LOEC		0.08	d	0.00004		mg/L	92.6	20380
Endosulfan	<i>Hydra vulgaris, Hydra</i>	REP	REP	CLUB	EC50		0.08	d	0.68		mg/L	92.6	20380
Endosulfan	<i>Hydra vulgaris, Hydra</i>	REP	REP	CLUB	NOEC		6	d	0.00004		mg/L	92.6	20380
Endosulfan	<i>Hydra vulgaris, Hydra</i>	REP	REP	CLUB	EC50		0.04	d	4.89		mg/L	92.6	20380
Endosulfan	<i>Hydra vulgaris, Hydra</i>	REP	REP	CLUB	LOEC		6	d	0.00008		mg/L	92.6	20380
Endosulfan	<i>Moinodaphnia macleayi, Water flea</i>	REP	REP	GREP	EC50		14	d	0.0288		mg/L	100	13678
Endosulfan	<i>Moinodaphnia macleayi, Water flea</i>	REP	REP	GREP	LOEC		14	d	0.04		mg/L	100	13678
Endosulfan	<i>Moinodaphnia macleayi, Water flea</i>	REP	REP	GREP	MATC		14	d	0.0283		mg/L	100	13678
Endosulfan	<i>Moinodaphnia macleayi, Water flea</i>	REP	REP	GREP	NOEC		14	d	0.02		mg/L	100	13678
Endosulfan	<i>Palaemonetes pugio, Daggerblade grass shrimp</i>	REP	REP	RSUC	NOAEL		27	d	0.0002491		mg/L	100	66370
Endosulfan	<i>Tigriopus japonicus, Harpacticoid copepod</i>	REP	REP	FCND	NOAEL	LOAEL	14	d	0.000999	0.00999	mg/L	99.9	10428 7
Endosulfan	<i>Tigriopus japonicus, Harpacticoid copepod</i>	REP	REP	FCND	NOAEL		14	d	0.00999		mg/L	99.9	10428 7

Table H-3. Estuarine/Marine Fish Data from ECOTOX

Table H-3. Estuarine/marine fish data from ECOTOX. Data are arranged in alphabetical order by Effect Group. The code list for ECOTOX can be found at: <http://cfpub.epa.gov/ecotox/blackbox/help/codelist.pdf>.

Chemical Name	Species	Effect Group	Effect	Meas	Endpt 1	Endpt 2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	<i>Cyprinodon variegatus, Sheepshead minnow</i>	ACC	ACC	RSDE	BCF		28	d	0.000040 TO 0.0011			36-64	14143
Endosulfan	<i>Cyprinodon variegatus, Sheepshead minnow</i>	ACC	ACC	RSDE	BCF		28	d	0.00009 TO 0.00010	mg/L		36-64	14143
Endosulfan	<i>Cyprinodon variegatus, Sheepshead minnow</i>	ACC	ACC	RSDE	BCF		28	d	0.00016 TO 0.0025	mg/L		36-64	14143
Endosulfan	<i>Cyprinodon variegatus, Sheepshead minnow</i>	ACC	ACC	RSDE	BCF		28	d	0.000028 TO 0.00079	mg/L		36-64	14143
Endosulfan	<i>Cyprinodon variegatus, Sheepshead minnow</i>	ACC	ACC	RSDE	BCF		28	d	0.000043 TO 0.000075	mg/L		36-64	14143
Endosulfan	<i>Cyprinodon variegatus, Sheepshead minnow</i>	ACC	ACC	RSDE	BCF		28	d	0.00007 TO 0.0056	mg/L		36-64	14143
Endosulfan	<i>Cyprinodon variegatus, Sheepshead minnow</i>	ACC	ACC	RSDE	BCF		28	d	0.00029 TO 0.0029	mg/L		36-64	14143
Endosulfan	<i>Cyprinodon variegatus, Sheepshead minnow</i>	ACC	ACC	GAC C	MATC		28	d	0.0003	mg/L	mg/L	100	14143
Endosulfan	<i>Cyprinodon variegatus, Sheepshead minnow</i>	ACC	ACC	RSDE	BCF		28	d	0.00012 TO 0.0021			36-64	14143
Endosulfan	<i>Cyprinodon variegatus, Sheepshead minnow</i>	ACC	ACC	RSDE	BCF		28	d	0.00002 TO 0.0048	mg/L		36-64	14143
Endosulfan	<i>Cyprinodon variegatus, Sheepshead minnow</i>	ACC	ACC	RSDE	BCF		28	d	0.00023 TO 0.010	mg/L		36-64	14143
Endosulfan	<i>Cyprinodon variegatus, Sheepshead minnow</i>	ACC	ACC	RSDE	BCF		28	d	0.00007 TO 0.0027	mg/L		36-64	14143
Endosulfan	<i>Cyprinodon variegatus, Sheepshead minnow</i>	ACC	ACC	RSDE	BCF		28	d	0.0027 TO 0.0047	mg/L		36-64	14143
Endosulfan	<i>Cyprinodon variegatus, Sheepshead minnow</i>	ACC	ACC	RSDE	BCF		28	d	0.00013 TO 0.0015	mg/L		36-64	14143
Endosulfan	<i>Lagodon rhomboides, Pinfish</i>	ACC	ACC	GAC C	BCF		4	d	0.00026	mg/L	mg/L	100	5882
Endosulfan	<i>Lagodon rhomboides, Pinfish</i>	ACC	ACC	GAC C	BCF		4	d	0.00015		mg/L	100	5882

Table H-3. Estuarine/Marine Fish Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt 1	Endpt 2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	<i>Leiostomus xanthurus, Spot</i>	ACC	ACC	GAC C	BCF		4	d	0.00005		mg/L	100	5882
Endosulfan	<i>Leiostomus xanthurus, Spot</i>	ACC	ACC	GAC C	BCF		4	d	0.000076		mg/L	100	5882
Endosulfan	<i>Leiostomus xanthurus, Spot</i>	ACC	ACC	GAC C	BCF		4	d	0.00031		mg/L	100	5882
Endosulfan	<i>Mugil cephalus, Striped mullet</i>	ACC	ACC	GAC C	BCF		10	d	0.00013		mg/L	100	80
Endosulfan	<i>Mugil cephalus, Striped mullet</i>	ACC	ACC	GAC C	BCF		10	d	0.00125		mg/L	100	80
Endosulfan	<i>Mugil cephalus, Striped mullet</i>	ACC	ACC	GAC C	BCF		10	d	0.00125		mg/L	100	80
Endosulfan	<i>Mugil cephalus, Striped mullet</i>	ACC	ACC	GAC C	BCF		10	d	0.00125		mg/L	100	80
Endosulfan	<i>Mugil cephalus, Striped mullet</i>	ACC	ACC	GAC C	BCF		10	d	0.00063		mg/L	100	80
Endosulfan	<i>Mugil cephalus, Striped mullet</i>	ACC	ACC	GAC C	BCF		10	d	0.00125		mg/L	100	80
Endosulfan	<i>Mugil cephalus, Striped mullet</i>	ACC	ACC	GAC C	BCF		10	d	0.00013		mg/L	100	80
Endosulfan	<i>Mugil cephalus, Striped mullet</i>	ACC	ACC	GAC C	BCF		10	d	0.00063		mg/L	100	80
Endosulfan	<i>Mugil cephalus, Striped mullet</i>	ACC	ACC	GAC C	BCF		10	d	0.00063		mg/L	100	80
Endosulfan	<i>Mugil cephalus, Striped mullet</i>	ACC	ACC	GAC C	BCF		10	d	0.00013		mg/L	100	80
Endosulfan	<i>Mugil cephalus, Striped mullet</i>	ACC	ACC	GAC C	BCF		10	d	0.00013		mg/L	100	80
Endosulfan	<i>Mugil cephalus, Striped mullet</i>	ACC	ACC	GAC C	BCF		10	d	0.00125		mg/L	100	80
Endosulfan	<i>Mugil cephalus, Striped mullet</i>	ACC	ACC	GAC C	BCF		10	d	0.00013		mg/L	100	80
Endosulfan	<i>Mugil cephalus, Striped mullet</i>	ACC	ACC	GAC C	BCF		10	d	0.00063		mg/L	100	80

Table H-3. Estuarine/Marine Fish Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt 1	Endpt 2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	<i>Mugil cephalus</i> , Striped mullet	ACC	ACC	GAC C	BCF		10	d	0.00013		mg/L	100	80
Endosulfan	<i>Mugil cephalus</i> , Striped mullet	ACC	ACC	GAC C	BCF		10	d	0.00125		mg/L	100	80
Endosulfan	<i>Mugil cephalus</i> , Striped mullet	ACC	ACC	GAC C	BCF		10	d	0.00063		mg/L	100	80
Endosulfan	<i>Mugil cephalus</i> , Striped mullet	ACC	ACC	GAC C	BCF		10	d	0.00063		mg/L	100	80
Endosulfan	<i>Mugil cephalus</i> , Striped mullet	ACC	ACC	GAC C	BCF		28	d	0.000035		mg/L	100	5882
Endosulfan	<i>Mugil cephalus</i> , Striped mullet	ACC	ACC	GAC C	BCF		4	d	0.00032		mg/L	100	5882
Endosulfan	<i>Mugil cephalus</i> , Striped mullet	ACC	ACC	GAC C	BCF		2	d	0.000035		mg/L	100	5882
Endosulfan	<i>Mugil cephalus</i> , Striped mullet	ACC	ACC	GAC C	BCF		4	d	0.00036		mg/L	100	5882
Endosulfan	<i>Mugil cephalus</i> , Striped mullet	ACC	ACC	GAC C	BCF		22	d	0.000035		mg/L	100	5882
Endosulfan	<i>Mugil cephalus</i> , Striped mullet	ACC	ACC	GAC C	BCF		1	d	0.000035		mg/L	100	5882
Endosulfan	<i>Mugil cephalus</i> , Striped mullet	ACC	ACC	GAC C	BCF		2	d	0.000035		mg/L	100	5882
Endosulfan	<i>Mugil cephalus</i> , Striped mullet	ACC	ACC	GAC C	BCF		28	d	0.000035		mg/L	100	5882
Endosulfan	<i>Mugil cephalus</i> , Striped mullet	ACC	ACC	GAC C	BCF		9	d	0.000035		mg/L	100	5882
Endosulfan	<i>Mugil cephalus</i> , Striped mullet	ACC	ACC	GAC C	BCF		16	d	0.000035		mg/L	100	5882
Endosulfan	<i>Mugil cephalus</i> , Striped mullet	ACC	ACC	GAC C	BCF		4	d	0.00049		mg/L	100	5882
Endosulfan	<i>Mugil cephalus</i> , Striped mullet	ACC	ACC	GAC C	BCF		9	d	0.000035		mg/L	100	5882
Endosulfan	<i>Mugil cephalus</i> , Striped mullet	ACC	ACC	GAC C	BCF		1	d	0.000035		mg/L	100	5882

Table H-3. Estuarine/Marine Fish Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt 1	Endpt 2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	<i>Mugil cephalus, Striped mullet</i>	ACC	ACC	GAC C	BCF		22	d	0.000035		mg/L	100	5882
Endosulfan	<i>Mugil cephalus, Striped mullet</i>	ACC	ACC	GAC C	BCF		16	d	0.000035		mg/L	100	5882
Endosulfan	<i>Mystus gulio, Catfish</i>	ACC	ACC	GAC C	BCF		10	d	0.00098		mg/L	100	80
Endosulfan	<i>Mystus gulio, Catfish</i>	ACC	ACC	GAC C	BCF		10	d	0.0002		mg/L	100	80
Endosulfan	<i>Mystus gulio, Catfish</i>	ACC	ACC	GAC C	BCF		10	d	0.0002		mg/L	100	80
Endosulfan	<i>Mystus gulio, Catfish</i>	ACC	ACC	GAC C	BCF		10	d	0.0002		mg/L	100	80
Endosulfan	<i>Mystus gulio, Catfish</i>	ACC	ACC	GAC C	BCF		10	d	0.00098		mg/L	100	80
Endosulfan	<i>Mystus gulio, Catfish</i>	ACC	ACC	GAC C	BCF		10	d	0.00098		mg/L	100	80
Endosulfan	<i>Mystus gulio, Catfish</i>	ACC	ACC	GAC C	BCF		10	d	0.00195		mg/L	100	80
Endosulfan	<i>Mystus gulio, Catfish</i>	ACC	ACC	GAC C	BCF		10	d	0.0002		mg/L	100	80
Endosulfan	<i>Mystus gulio, Catfish</i>	ACC	ACC	GAC C	BCF		10	d	0.00098		mg/L	100	80
Endosulfan	<i>Mystus gulio, Catfish</i>	ACC	ACC	GAC C	BCF		10	d	0.00195		mg/L	100	80
Endosulfan	<i>Mystus gulio, Catfish</i>	ACC	ACC	GAC C	BCF		10	d	0.00098		mg/L	100	80
Endosulfan	<i>Mystus gulio, Catfish</i>	ACC	ACC	GAC C	BCF		10	d	0.00195		mg/L	100	80
Endosulfan	<i>Mystus gulio, Catfish</i>	ACC	ACC	GAC C	BCF		10	d	0.00195		mg/L	100	80
Endosulfan	<i>Mystus gulio, Catfish</i>	ACC	ACC	GAC C	BCF		10	d	0.0002		mg/L	100	80
Endosulfan	<i>Mystus gulio, Catfish</i>	ACC	ACC	GAC C	BCF		10	d	0.00098		mg/L	100	80

Table H-3. Estuarine/Marine Fish Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt 1	Endpt 2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	<i>Mystus gulio</i> , Catfish	ACC	ACC	GAC C	BCF		10	d	0.0002		mg/L	100	80
Endosulfan	<i>Mystus gulio</i> , Catfish	ACC	ACC	GAC C	BCF		10	d	0.00195		mg/L	100	80
Endosulfan	<i>Mystus gulio</i> , Catfish	ACC	ACC	GAC C	BCF		10	d	0.00195		mg/L	100	80
Endosulfan	<i>Sparus aurata</i> , Gilthead seabream	CEL	GEN	NABN	NOAE L	LOAE L	4	d	0.0001	0.0005	mg/L	100	99563
Endosulfan	<i>Cyprinodon variegatus</i> , Sheepshead minnow	GRO	GRO	GGR O	NOEC		28	d	0.0005		mg/L	100	14143
Endosulfan	<i>Cyprinodon variegatus</i> , Sheepshead minnow	GRO	GRO	GGR O	LOEC		28	d	0.00075		mg/L	100	14143
Endosulfan	<i>Cyprinodon variegatus</i> , Sheepshead minnow	GRO	GRO	GGR O	NOEC		28	d	0.00031		mg/L	100	14143
Endosulfan	<i>Cyprinodon variegatus</i> , Sheepshead minnow	GRO	GRO	GGR O	LOEC		28	d	0.00047		mg/L	100	14143
Endosulfan	<i>Cyprinodon variegatus</i> , Sheepshead minnow	GRO	GRO	GGR O	MATC		28	d	0.00068		mg/L	100	14143
Endosulfan	<i>Cyprinodon variegatus</i> , Sheepshead minnow	GRO	GRO	GGR O	LOEC		28	d	0.00043		mg/L	100	14143
Endosulfan	<i>Cyprinodon variegatus</i> , Sheepshead minnow	GRO	GRO	GGR O	LOEC		28	d	0.00054		mg/L	100	14143
Endosulfan	<i>Cyprinodon variegatus</i> , Sheepshead minnow	GRO	GRO	GGR O	NOEC		28	d	0.0002		mg/L	100	14143
Endosulfan	<i>Cyprinodon variegatus</i> , Sheepshead minnow	GRO	GRO	GGR O	LOEC		28	d	0.00092		mg/L	100	14143
Endosulfan	<i>Cyprinodon variegatus</i> , Sheepshead minnow	GRO	GRO	GGR O	MATC		28	d	<0.27		mg/L	100	14143
Endosulfan	<i>Cyprinodon variegatus</i> , Sheepshead minnow	GRO	GRO	GGR O	MATC		28	d	0.00027		mg/L	100	14143
Endosulfan	<i>Cyprinodon variegatus</i> , Sheepshead minnow	GRO	GRO	GGR O	NOEC		28	d	0.00029		mg/L	100	14143
Endosulfan	<i>Cyprinodon variegatus</i> , Sheepshead minnow	GRO	GRO	GGR O	NOEC		28	d	0.00029		mg/L	100	14143

Table H-3. Estuarine/Marine Fish Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt 1	Endpt 2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	<i>Cyprinodon variegatus, Sheepshead minnow</i>	GRO	GRO	GGR O	LOEC		28	d	<0.27		mg/L	100	14143
Endosulfan	<i>Cyprinodon variegatus, Sheepshead minnow</i>	GRO	GRO	GGR O	NOEC		28	d	0.00017		mg/L	100	14143
Endosulfan	<i>Cyprinodon variegatus, Sheepshead minnow</i>	GRO	GRO	GGR O	LOEC		28	d	0.00046		mg/L	100	14143
Endosulfan	<i>Cyprinodon variegatus, Sheepshead minnow</i>	GRO	GRO	GGR O	MATC		28	d	0.00047		mg/L	100	14143
Endosulfan	<i>Cyprinodon variegatus, Sheepshead minnow</i>	GRO	GRO	GGR O	MATC		28	d	0.00037		mg/L	100	14143
Endosulfan	<i>Cyprinodon variegatus, Sheepshead minnow</i>	GRO	GRO	GGR O	MATC		28	d	0.00041		mg/L	100	14143
Endosulfan	<i>Cymatogaster aggregata, Shiner perch</i>	MOR	MOR	MOR T	LC50		4	d	0.0011		mg/L	100	2264
Endosulfan	<i>Cymatogaster aggregata, Shiner perch</i>	MOR	MOR	MOR T	LC50		4	d	0.00106		mg/L	100	3752
Endosulfan	<i>Cyprinodon variegatus, Sheepshead minnow</i>	MOR	MOR	MOR T	LC50		4	d	0.00345		mg/L	100	3740
Endosulfan	<i>Cyprinodon variegatus, Sheepshead minnow</i>	MOR	MOR	MOR T	LC50		4	d	0.0012		mg/L	100	3740
Endosulfan	<i>Cyprinodon variegatus, Sheepshead minnow</i>	MOR	MOR	MOR T	LC50		4	d	0.00088		mg/L	100	3740
Endosulfan	<i>Cyprinodon variegatus, Sheepshead minnow</i>	MOR	MOR	MOR T	LC50		4	d	0.00071		mg/L	100	3740
Endosulfan	<i>Cyprinodon variegatus, Sheepshead minnow</i>	MOR	MOR	MOR T	LC50		4	d	0.0011		mg/L	100	3740
Endosulfan	<i>Cyprinodon variegatus, Sheepshead minnow</i>	MOR	MOR	MOR T	LC50		4	d	0.0014		mg/L	100	3740
Endosulfan	<i>Cyprinodon variegatus, Sheepshead minnow</i>	MOR	MOR	MOR T	LC50		4	d	0.0006		mg/L	100	3740
Endosulfan	<i>Cyprinodon variegatus, Sheepshead minnow</i>	MOR	MOR	MOR T	LC50		4	d	0.0027		mg/L	100	3740
Endosulfan	<i>Cyprinodon variegatus, Sheepshead minnow</i>	MOR	MOR	MOR T	LC50		4	d	0.00083		mg/L	100	3740

Table H-3. Estuarine/Marine Fish Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt 1	Endpt 2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	<i>Cyprinodon variegatus, Sheepshead minnow</i>	MOR	MOR	MOR T	LC50		4	d	0.00274		mg/L	100	3740
Endosulfan	<i>Cyprinodon variegatus, Sheepshead minnow</i>	MOR	MOR	MOR T	LC50		4	d	0.0014		mg/L	100	3740
Endosulfan	<i>Cyprinodon variegatus, Sheepshead minnow</i>	MOR	MOR	MOR T	LC50		4	d	0.00034		mg/L	100	3740
Endosulfan	<i>Cyprinodon variegatus, Sheepshead minnow</i>	MOR	MOR	MOR T	LC50		4	d	0.00161		mg/L	100	3740
Endosulfan	<i>Cyprinodon variegatus, Sheepshead minnow</i>	MOR	MOR	MOR T	LC50		4	d	0.00287		mg/L	100	3740
Endosulfan	<i>Cyprinodon variegatus, Sheepshead minnow</i>	MOR	MOR	MOR T	LC50		4	d	0.0025		mg/L	100	3740
Endosulfan	<i>Cyprinodon variegatus, Sheepshead minnow</i>	MOR	MOR	MOR T	LC50		4	d	0.00115		mg/L	100	3740
Endosulfan	<i>Cyprinodon variegatus, Sheepshead minnow</i>	MOR	MOR	MOR T	LC50		4	d	0.00119		mg/L	100	3740
Endosulfan	<i>Cyprinodon variegatus, Sheepshead minnow</i>	MOR	MOR	MOR T	LC50		4	d	0.00281		mg/L	100	3740
Endosulfan	<i>Cyprinodon variegatus, Sheepshead minnow</i>	MOR	MOR	MOR T	NOEC		28	d	0.00027		mg/L	100	14143
Endosulfan	<i>Cyprinodon variegatus, Sheepshead minnow</i>	MOR	MOR	MOR T	MATC		28	d	0.0026		mg/L	100	14143
Endosulfan	<i>Cyprinodon variegatus, Sheepshead minnow</i>	MOR	MOR	MOR T	NOEC		28	d	0.00058		mg/L	100	14143
Endosulfan	<i>Cyprinodon variegatus, Sheepshead minnow</i>	MOR	MOR	MOR T	LOEC		28	d	0.0012		mg/L	100	14143
Endosulfan	<i>Cyprinodon variegatus, Sheepshead minnow</i>	MOR	MOR	MOR T	LOEC		28	d	0.0012		mg/L	100	14143
Endosulfan	<i>Cyprinodon variegatus, Sheepshead minnow</i>	MOR	MOR	MOR T	MATC		28	d	0.00083		mg/L	100	14143
Endosulfan	<i>Cyprinodon variegatus, Sheepshead minnow</i>	MOR	MOR	MOR T	MATC		28	d	0.00021		mg/L	100	14143
Endosulfan	<i>Cyprinodon variegatus, Sheepshead minnow</i>	MOR	MOR	MOR T	NOEC		28	d	0.00021		mg/L	100	14143

Table H-3. Estuarine/Marine Fish Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt 1	Endpt 2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	<i>Cyprinodon variegatus, Sheepshead minnow</i>	MOR	MOR	MOR T	LOEC		28	d	0.00041		mg/L	100	14143
Endosulfan	<i>Cyprinodon variegatus, Sheepshead minnow</i>	MOR	MOR	MOR T	MATC		28	d	0.00041		mg/L	100	14143
Endosulfan	<i>Cyprinodon variegatus, Sheepshead minnow</i>	MOR	MOR	MOR T	NOEC		28	d	0.00045		mg/L	100	14143
Endosulfan	<i>Cyprinodon variegatus, Sheepshead minnow</i>	MOR	MOR	MOR T	MATC		28	d	0.00045		mg/L	100	14143
Endosulfan	<i>Cyprinodon variegatus, Sheepshead minnow</i>	MOR	MOR	MOR T	LOEC		28	d	0.00075		mg/L	100	14143
Endosulfan	<i>Cyprinodon variegatus, Sheepshead minnow</i>	MOR	MOR	MOR T	MATC		28	d	0.00177		mg/L	100	14143
Endosulfan	<i>Cyprinodon variegatus, Sheepshead minnow</i>	MOR	MOR	MOR T	NOEC		28	d	0.00062		mg/L	100	14143
Endosulfan	<i>Cyprinodon variegatus, Sheepshead minnow</i>	MOR	MOR	MOR T	LOEC		28	d	0.00055		mg/L	100	14143
Endosulfan	<i>Cyprinodon variegatus, Sheepshead minnow</i>	MOR	MOR	MOR T	MATC		28	d	0.00067		mg/L	100	14143
Endosulfan	<i>Cyprinodon variegatus, Sheepshead minnow</i>	MOR	MOR	MOR T	MATC		28	d	0.00086		mg/L	100	14143
Endosulfan	<i>Cyprinodon variegatus, Sheepshead minnow</i>	MOR	MOR	MOR T	LOEC		28	d	0.0026		mg/L	100	14143
Endosulfan	<i>Cyprinodon variegatus, Sheepshead minnow</i>	MOR	MOR	MOR T	LOEC		28	d	0.001		mg/L	100	14143
Endosulfan	<i>Cyprinodon variegatus, Sheepshead minnow</i>	MOR	MOR	MOR T	NOEC		28	d	0.0003		mg/L	100	14143
Endosulfan	<i>Cyprinodon variegatus, Sheepshead minnow</i>	MOR	MOR	MOR T	NOEC		28	d	0.0012		mg/L	100	14143
Endosulfan	<i>Fundulus heteroclitus, Mummichog</i>	MOR	MOR	MOR T	LC50		4	d	0.00132 TO 0.00159			99	95846
Endosulfan	<i>Fundulus heteroclitus, Mummichog</i>	MOR	MOR	MOR T	LC50		4	d	>0.000998	mg/L	mg/L	100	3726
Endosulfan	<i>Fundulus heteroclitus, Mummichog</i>	MOR	MOR	MOR T	LC50		4	d	0.00118 TO 0.00283			100	3726

mg/L

Table H-3. Estuarine/Marine Fish Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt 1	Endpt 2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	<i>Fundulus heteroclitus, Mummichog</i>	MOR	MOR	MOR T	LC50		4	d	0.00255 TO 0.00386			100	3726
Endosulfan	<i>Fundulus heteroclitus, Mummichog</i>	MOR	MOR	MOR T	LC50		4	d	0.00072 TO 0.00113	mg/L		100	73399
Endosulfan	<i>Lagodon rhomboides, Pinfish</i>	MOR	MOR	MOR T	LC50		4	d	0.0003	mg/L	mg/L	100	5882
Endosulfan	<i>Leiostomus xanthurus, Spot</i>	MOR	MOR	MOR T	EC50		1	d	0.0009		mg/L	100	646
Endosulfan	<i>Leiostomus xanthurus, Spot</i>	MOR	MOR	MOR T	EC50		2	d	0.0006		mg/L	100	646
Endosulfan	<i>Leiostomus xanthurus, Spot</i>	MOR	MOR	MOR T	LC50		4	d	0.00009		mg/L	100	5882
Endosulfan	<i>Mugil cephalus, Striped mullet</i>	MOR	MOR	MOR T	LETC		2	d	0.02332		mg/L	100	276
Endosulfan	<i>Mugil cephalus, Striped mullet</i>	MOR	MOR	MOR T	LETC		1	d	0.02417		mg/L	100	276
Endosulfan	<i>Mugil cephalus, Striped mullet</i>	MOR	MOR	MOR T	LETC		4	d	0.01252		mg/L	100	276
Endosulfan	<i>Mugil cephalus, Striped mullet</i>	MOR	MOR	MOR T	LETC		5	d	0.01208		mg/L	100	276
Endosulfan	<i>Mugil cephalus, Striped mullet</i>	MOR	MOR	MOR T	LETC		3	d	0.02014		mg/L	100	276
Endosulfan	<i>Mugil cephalus, Striped mullet</i>	MOR	MOR	MOR T	LC50		4	d	0.00038		mg/L	100	5882
Endosulfan	<i>Mystus gulio, Catfish</i>	MOR	MOR	MOR T	LETC		3	d	0.02036		mg/L	100	276
Endosulfan	<i>Mystus gulio, Catfish</i>	MOR	MOR	MOR T	LETC		2	d	0.02261		mg/L	100	276
Endosulfan	<i>Mystus gulio, Catfish</i>	MOR	MOR	MOR T	LETC		1	d	0.02605		mg/L	100	276
Endosulfan	<i>Mystus gulio, Catfish</i>	MOR	MOR	MOR T	LETC		4	d	0.01952		mg/L	100	276
Endosulfan	<i>Mystus gulio, Catfish</i>	MOR	MOR	MOR T	LETC		5	d	0.01608		mg/L	100	276

Table H-3. Estuarine/Marine Fish Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt 1	Endpt 2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	<i>Oncorhynchus kisutch, Coho salmon, silver salmon</i>	MOR	MOR	MOR T	LC50		4	d	0.0017 TO 0.0025			100	2264
Endosulfan	<i>Oncorhynchus kisutch, Coho salmon, silver salmon</i>	MOR	MOR	MOR T	LC50		4	d	0.00169 TO 0.00252	mg/L		100	3752
Endosulfan	<i>Sparus aurata, Gilthead seabream</i>	MOR	MOR	SURV	NOAE L			d	0.001	mg/L	mg/L	100	99563
Endosulfan	<i>Oncorhynchus kisutch, Coho salmon, silver salmon</i>	REP	REP	FERZ	EC50	4	0.042	d	>765.5		mg/L	100	3752

Table H-4. Estuarine/marine invertebrate data from ECOTOX. Data are arranged in alphabetical order by Effect Group. The code list for ECOTOX can be found at: <http://cfpub.epa.gov/ecotox/blackbox/help/codelist.pdf>.

Chemical Name	Species	Effect Group	Effect	Meas	Endpt 1	Endpt 2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	<i>Crassostrea madrasensis, Oyster</i>	ACC	ACC	GACC	BCF		10	d	0.00141		mg/L	100	80
Endosulfan	<i>Crassostrea madrasensis, Oyster</i>	ACC	ACC	GACC	BCF		10	d	0.00014		mg/L	100	80
Endosulfan	<i>Crassostrea madrasensis, Oyster</i>	ACC	ACC	GACC	BCF		10	d	0.00141		mg/L	100	80
Endosulfan	<i>Crassostrea madrasensis, Oyster</i>	ACC	ACC	GACC	BCF		10	d	0.00071		mg/L	100	80
Endosulfan	<i>Crassostrea madrasensis, Oyster</i>	ACC	ACC	GACC	BCF		10	d	0.00071		mg/L	100	80
Endosulfan	<i>Crassostrea madrasensis, Oyster</i>	ACC	ACC	GACC	BCF		10	d	0.00141		mg/L	100	80
Endosulfan	<i>Crassostrea madrasensis, Oyster</i>	ACC	ACC	GACC	BCF		10	d	0.00014		mg/L	100	80
Endosulfan	<i>Crassostrea madrasensis, Oyster</i>	ACC	ACC	GACC	BCF		10	d	0.00071		mg/L	100	80
Endosulfan	<i>Crassostrea madrasensis, Oyster</i>	ACC	ACC	GACC	BCF		10	d	0.00071		mg/L	100	80

Table H-4. Estuarine/Marine Invertebrate Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt 1	Endpt 2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Crassostrea madrasensis, Oyster	ACC	ACC	GACC	BCF		10	d	0.00141		mg/L	100	80
Endosulfan	Crassostrea madrasensis, Oyster	ACC	ACC	GACC	BCF		10	d	0.00071		mg/L	100	80
Endosulfan	Crassostrea madrasensis, Oyster	ACC	ACC	GACC	BCF		10	d	0.00014		mg/L	100	80
Endosulfan	Crassostrea madrasensis, Oyster	ACC	ACC	GACC	BCF		10	d	0.00014		mg/L	100	80
Endosulfan	Crassostrea madrasensis, Oyster	ACC	ACC	GACC	BCF		10	d	0.00141		mg/L	100	80
Endosulfan	Crassostrea madrasensis, Oyster	ACC	ACC	GACC	BCF		10	d	0.00014		mg/L	100	80
Endosulfan	Crassostrea madrasensis, Oyster	ACC	ACC	RSDE	BCF		10	d	0.0001427		mg/L	100	14270
Endosulfan	Crassostrea virginica, American or virginia oyster	ACC	ACC	RSDE	BCF			d	0.0002			100	73399
Endosulfan	Crassostrea virginica, American or virginia oyster	ACC	ACC	RSDE	BCF	8	4	d	0.000055 TO 0.000176	mg/l		100	73399
Endosulfan	Crassostrea virginica, American or virginia oyster	ACC	ACC	RSDE	BCF		4	d	0.000124 TO 0.000521	mg/l		100	73399
Endosulfan	Crassostrea virginica, American or virginia oyster	ACC	ACC	RSDE	BCF		4	d	0.000285 TO 0.002988	mg/l		100	73399
Endosulfan	Katelsia opima, Marine bivalve	ACC	ACC	GACC	BCF		10	d	0.00014	mg/l	mg/L	100	80
Endosulfan	Katelsia opima, Marine bivalve	ACC	ACC	GACC	BCF		10	d	0.00071		mg/L	100	80
Endosulfan	Katelsia opima, Marine bivalve	ACC	ACC	GACC	BCF		10	d	0.00014		mg/L	100	80
Endosulfan	Katelsia opima, Marine bivalve	ACC	ACC	GACC	BCF		10	d	0.00041		mg/L	100	80
Endosulfan	Katelsia opima, Marine bivalve	ACC	ACC	GACC	BCF		10	d	0.00071		mg/L	100	80
Endosulfan	Katelsia opima, Marine bivalve	ACC	ACC	GACC	BCF		10	d	0.00142		mg/L	100	80

Table H-4. Estuarine/Marine Invertebrate Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt 1	Endpt 2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Katelysia opima, Marine bivalve	ACC	ACC	GACC	BCF		10	d	0.00071		mg/L	100	80
Endosulfan	Katelysia opima, Marine bivalve	ACC	ACC	GACC	BCF		10	d	0.00141		mg/L	100	80
Endosulfan	Katelysia opima, Marine bivalve	ACC	ACC	GACC	BCF		10	d	0.00142		mg/L	100	80
Endosulfan	Katelysia opima, Marine bivalve	ACC	ACC	GACC	BCF		10	d	0.00014		mg/L	100	80
Endosulfan	Katelysia opima, Marine bivalve	ACC	ACC	GACC	BCF		10	d	0.00014		mg/L	100	80
Endosulfan	Katelysia opima, Marine bivalve	ACC	ACC	GACC	BCF		10	d	0.00142		mg/L	100	80
Endosulfan	Katelysia opima, Marine bivalve	ACC	ACC	GACC	BCF		10	d	0.00071		mg/L	100	80
Endosulfan	Katelysia opima, Marine bivalve	ACC	ACC	GACC	BCF		10	d	0.00142		mg/L	100	80
Endosulfan	Katelysia opima, Marine bivalve	ACC	ACC	GACC	BCF		10	d	0.00071		mg/L	100	80
Endosulfan	Mytilus edulis, Common bay mussel,blue mussel	ACC	ACC	GACC	BCF		27	d	0.5		mg/L	100	9179
Endosulfan	Mytilus edulis, Common bay mussel,blue mussel	ACC	ACC	GACC	BCF		70	d	1		mg/L	100	9179
Endosulfan	Mytilus edulis, Common bay mussel,blue mussel	ACC	ACC	GACC	BCF		27	d	1		mg/L	100	9179
Endosulfan	Mytilus edulis, Common bay mussel,blue mussel	ACC	ACC	GACC	BCF		70	d	0.1		mg/L	100	9179
Endosulfan	Mytilus edulis, Common bay mussel,blue mussel	ACC	ACC	GACC	BCF		70	d	0.5		mg/L	100	9179
Endosulfan	Mytilus edulis, Common bay mussel,blue mussel	ACC	ACC	GACC	BCF		14	d	1		mg/L	100	9179
Endosulfan	Mytilus edulis, Common bay mussel,blue mussel	ACC	ACC	GACC	BCF		56	d	0.1		mg/L	100	9179
Endosulfan	Mytilus edulis, Common bay mussel,blue mussel	ACC	ACC	GACC	BCF		85	d	0.1		mg/L	100	9179

Table H-4. Estuarine/Marine Invertebrate Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt 1	Endpt 2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Mytilus edulis, Common bay mussel,blue mussel	ACC	ACC	GACC	BCF		42	d	1		mg/L	100	9179
Endosulfan	Mytilus edulis, Common bay mussel,blue mussel	ACC	ACC	GACC	BCF		100	d	0.5		mg/L	100	9179
Endosulfan	Mytilus edulis, Common bay mussel,blue mussel	ACC	ACC	GACC	BCF		56	d	1		mg/L	100	9179
Endosulfan	Mytilus edulis, Common bay mussel,blue mussel	ACC	ACC	GACC	BCF		85	d	1		mg/L	100	9179
Endosulfan	Mytilus edulis, Common bay mussel,blue mussel	ACC	ACC	GACC	BCF		27	d	0.1		mg/L	100	9179
Endosulfan	Mytilus edulis, Common bay mussel,blue mussel	ACC	ACC	GACC	BCF		112	d	0.1		mg/L	100	9179
Endosulfan	Mytilus edulis, Common bay mussel,blue mussel	ACC	ACC	GACC	BCF		85	d	0.5		mg/L	100	9179
Endosulfan	Mytilus edulis, Common bay mussel,blue mussel	ACC	ACC	GACC	BCF		112	d	1		mg/L	100	9179
Endosulfan	Mytilus edulis, Common bay mussel,blue mussel	ACC	ACC	GACC	BCF		56	d	0.5		mg/L	100	9179
Endosulfan	Mytilus edulis, Common bay mussel,blue mussel	ACC	ACC	GACC	BCF		100	d	0.1		mg/L	100	9179
Endosulfan	Mytilus edulis, Common bay mussel,blue mussel	ACC	ACC	GACC	BCF		14	d	0.5		mg/L	100	9179
Endosulfan	Mytilus edulis, Common bay mussel,blue mussel	ACC	ACC	GACC	BCF		14	d	0.1		mg/L	100	9179
Endosulfan	Mytilus edulis, Common bay mussel,blue mussel	ACC	ACC	GACC	BCF		42	d	0.5		mg/L	100	9179
Endosulfan	Mytilus edulis, Common bay mussel,blue mussel	ACC	ACC	GACC	BCF		100	d	1		mg/L	100	9179
Endosulfan	Mytilus edulis, Common bay mussel,blue mussel	ACC	ACC	GACC	BCF		112	d	0.5		mg/L	100	9179
Endosulfan	Mytilus edulis, Common bay mussel,blue mussel	ACC	ACC	GACC	BCF		42	d	0.1		mg/L	100	9179
Endosulfan	Palaemonetes pugio, Daggerblade grass shrimp	ACC	ACC	GACC	BCF			d	0.00046			100	5882

Table H-4. Estuarine/Marine Invertebrate Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt 1	Endpt 2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Palaemonetes pugio, Daggerblade grass shrimp	ACC	ACC	GACC	BCF			d	0.0004			100	5882
Endosulfan	Palaemonetes pugio, Daggerblade grass shrimp	ACC	ACC	GACC	BCF	4		d	0.00175	mg/l		100	5882
Endosulfan	Palaemonetes pugio, Daggerblade grass shrimp	ACC	ACC	GACC	BCF	4		d	0.00099	mg/l		100	5882
Endosulfan	Palaemonetes pugio, Daggerblade grass shrimp	ACC	ACC	GACC	BCF	4		d	0.00016	mg/l		100	5882
Endosulfan	Ilyanassa obsoleta, Mudsnailed	BCM	BCM	HP70	LOAE L	4		d	0.00005	mg/l	mg/L	99	66412
Endosulfan	Ilyanassa obsoleta, Mudsnailed	BCM	ENZ	MNSD	LOAE L	0.33		d	0.00005		mg/L	99	66412
Endosulfan	Palaemonetes pugio, Daggerblade grass shrimp	BCM	BCM	CHOL	NOAE L	LOAE 10.33	50	d	0.0001344	0.000249	mg/L	98.6	103257
Endosulfan	Palaemonetes pugio, Daggerblade grass shrimp	BCM	HRM	ECDS	NOAE L		50	d	0.0002491		mg/L	98.6	103257
Endosulfan	Palaemonetes pugio, Daggerblade grass shrimp	BCM	HRM	ECDS	NOAE L			d	0.000243		mg/L	98.6	103257
Endosulfan	Palaemonetes pugio, Daggerblade grass shrimp	BCM	BCM	CHOL	NOAE L	LOAE 50	50	d	0.0000974	0.000243	mg/L	98.6	103257
Endosulfan	Acropora millepora, Coral	BEH	BEH	SWIM	NOAE L			d	0.03		mg/L	100	100575
Endosulfan	Acropora millepora, Coral	BEH	BEH	SWIM	NOAE L	0.75		d	0.001		mg/L	100	100575
Endosulfan I	Mytilus edulis, Common bay mussel, blue mussel	BEH	BEH	DTCH	EC50	0.75		d	0.45			100	6291
Endosulfan I	Mytilus edulis, Common bay mussel, blue mussel	BEH	BEH	DTCH	EC50	1		d	0.44	mg/l		100	6291
Endosulfan I	Mytilus edulis, Common bay mussel, blue mussel	BEH	BEH	DTCH	EC50	1		d	0.8	mg/l		100	6291
Endosulfan	Crassostrea gigas, Pacific oyster	CEL	GEN	BRAK	NOAE L	LOAE 4	0.67	d	15	150 mg/l	nM	100	103174
Endosulfan	Palaemonetes pugio, Daggerblade grass shrimp	CEL	GEN	GEXP	LOAE L			d	0.0012			100	103383

Table H-4. Estuarine/Marine Invertebrate Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt 1	Endpt 2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Acropora millepora, Coral	GRO	DVP	MMP H	LOEC		0.75	d	0.001		mg/L	100	100575
Endosulfan	Acropora millepora, Coral	GRO	DVP	MMP H	EC50		0.75	d	0.001		mg/L	100	100575
Endosulfan	Acropora millepora, Coral	GRO	DVP	MMP H	NOAE L	LOAE L	0.75	d	0.0003	0.001	mg/L	100	100575
Endosulfan	Americamysis bahia, Opossum shrimp	GRO	GRO	GGR O	MATC		28	d	0.001		mg/L	100	11871
Endosulfan	Crassostrea gigas, Pacific oyster	GRO	DVP	ABNM	NOAE L	LOAE L	0.83	d	150	300	nM	100	103174
Endosulfan	Crassostrea gigas, Pacific oyster	GRO	DVP	GDVP	EC50			d	0.055			100	3752
Endosulfan	Crassostrea virginica, American or virginia oyster	GRO	MPH	DEPO	EC50	2		d	0.042		mg/l	96	14574
Endosulfan	Crassostrea virginica, American or virginia oyster	GRO	MPH	DEPO	EC50	4		d	0.21		mg/l	96	14574
Endosulfan	Dendraster excentricus, Sand dollar	GRO	DVP	GDVP	EC50	4		d	0.352		mg/l	100	2264
Endosulfan	Dendraster excentricus, Sand dollar	GRO	DVP	GDVP	EC50	5		d	0.822		mg/l	100	2264
Endosulfan	Dendraster excentricus, Sand dollar	GRO	DVP	GDVP	EC50	3		d	0.8222		mg/l	100	3752
Endosulfan	Macrophthalmus erato, Mangrove crab	GRO	DVP	GDVP	LOEC	3	4.08	d	0.000048		mg/L	100	69214
Endosulfan	Macrophthalmus erato, Mangrove crab	GRO	DVP	GDVP	LOEC		6.05	d	0.000048		mg/L	100	69214
Endosulfan	Macrophthalmus erato, Mangrove crab	GRO	DVP	GDVP	LOEC		8.1	d	0.000048		mg/L	100	69214
Endosulfan	Macrophthalmus erato, Mangrove crab	GRO	DVP	GDVP	LOEC		10.68	d	0.000048		mg/L	100	69214
Endosulfan	Macrophthalmus erato, Mangrove crab	GRO	DVP	GDVP	LOEC		12.23	d	0.000048		mg/L	100	69214
Endosulfan	Macrophthalmus erato, Mangrove crab	GRO	DVP	GDVP	LOEC		18.53	d	0.000048		mg/L	100	69214

Table H-4. Estuarine/Marine Invertebrate Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt 1	Endpt 2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Mytilus edulis, Common bay mussel, blue mussel	GRO	DVP	GDVP	EC50			d	0.2123			100	3752
Endosulfan	Palaemonetes pugio, Daggerblade grass shrimp	GRO	DVP	TEMR	NOAE L	LOAE L ₃	4.8	d	0.1	0.2 mg/l	mg/L	100	71986
Endosulfan	Strongylocentrotus droebachiensis, Green sea urchin	GRO	DVP	GDVP	EC50			d	>0.549			100	2264
Endosulfan	Strongylocentrotus droebachiensis, Green sea urchin	GRO	DVP	GDVP	EC50	5		d	>549		mg/L	100	3752
Endosulfan	Strongylocentrotus purpuratus, Purple sea urchin	GRO	DVP	GDVP	EC50	5		d	0.227		mg/L	100	2264
Endosulfan	Strongylocentrotus purpuratus, Purple sea urchin	GRO	DVP	GDVP	EC50	5		d	0.227		mg/L	100	3752
Endosulfan	Americamysis bahia, Opossum shrimp	MOR	MOR	MORT	LOAE L	5		d	0.0045		mg/L	100	90259
Endosulfan	Americamysis bahia, Opossum shrimp	MOR	MOR	MORT	MATC	4	28	d	0.00048		mg/L	100	103180
Endosulfan	Americamysis bahia, Opossum shrimp	MOR	MOR	SURV	NOAE L	LOAE L	28	d	0.00033	0.00071	mg/L	100	103180
Endosulfan	Americamysis bahia, Opossum shrimp	MOR	MOR	MORT	MATC		28	d	0.00025		mg/L	100	3736
Endosulfan	Americamysis bahia, Opossum shrimp	MOR	MOR	MORT	MATC		28	d	0.00041		mg/L	100	3736
Endosulfan	Americamysis bahia, Opossum shrimp	MOR	MOR	MORT	MATC		28	d	0.00041		mg/L	100	3736
Endosulfan	Americamysis bahia, Opossum shrimp	MOR	MOR	MORT	MATC		28	d	0.00021		mg/L	100	3736
Endosulfan	Americamysis bahia, Opossum shrimp	MOR	MOR	MORT	MATC		28	d	0.001		mg/L	100	3736
Endosulfan	Americamysis bahia, Opossum shrimp	MOR	MOR	MORT	MATC		28	d	0.00048		mg/L	100	3736
Endosulfan	Americamysis bahia, Opossum shrimp	MOR	MOR	MORT	LC50			d	0.00104			100	3740

Table H-4. Estuarine/Marine Invertebrate Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt 1	Endpt 2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Americamysis bahia, Opossum shrimp	MOR	MOR	MORT	LC50			d	0.00112			100	3740
Endosulfan	Americamysis bahia, Opossum shrimp	MOR	MOR	MORT	LC50	4		d	0.00075	mg/l		100	3740
Endosulfan	Americamysis bahia, Opossum shrimp	MOR	MOR	MORT	LC50	4		d	0.00024	mg/l		100	3740
Endosulfan	Americamysis bahia, Opossum shrimp	MOR	MOR	MORT	LC50	4		d	0.00104	mg/l		100	3740
Endosulfan	Americamysis bahia, Opossum shrimp	MOR	MOR	MORT	LC50	4		d	0.00094	mg/l		100	3740
Endosulfan	Americamysis bahia, Opossum shrimp	MOR	MOR	MORT	LC50	4		d	0.00034	mg/l		100	3740
Endosulfan	Americamysis bahia, Opossum shrimp	MOR	MOR	MORT	LC50	4		d	0.00036	mg/l		100	3740
Endosulfan	Americamysis bahia, Opossum shrimp	MOR	MOR	MORT	LC50	4		d	0.00177	mg/l		100	3740
Endosulfan	Americamysis bahia, Opossum shrimp	MOR	MOR	MORT	LC50	4		d	0.00073	mg/l		100	3740
Endosulfan	Americamysis bahia, Opossum shrimp	MOR	MOR	MORT	LC50	4		d	0.00038	mg/l		100	3740
Endosulfan	Americamysis bahia, Opossum shrimp	MOR	MOR	MORT	LC50	4		d	0.00147	mg/l		100	3740
Endosulfan	Americamysis bahia, Opossum shrimp	MOR	MOR	MORT	LC50	4		d	0.00116	mg/l		100	3740
Endosulfan	Americamysis bahia, Opossum shrimp	MOR	MOR	MORT	LC50	4		d	0.00046	mg/l		100	3740
Endosulfan	Americamysis bahia, Opossum shrimp	MOR	MOR	MORT	LC50	4		d	0.00129	mg/l		100	3740
Endosulfan	Americamysis bahia, Opossum shrimp	MOR	MOR	MORT	LC50	4		d	0.00152	mg/l		100	3740
Endosulfan	Americamysis bahia, Opossum shrimp	MOR	MOR	MORT	MATC	4	28	d	0.00033 TO 0.00071	mg/l		100	3750
Endosulfan	Artemia parthenogenetica, Brine shrimp	MOR	MOR	MORT	LC50			d	1.8905	mg/l		95	20398

Table H-4. Estuarine/Marine Invertebrate Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt 1	Endpt 2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Artemia parthenogenetica, Brine shrimp	MOR	MOR	MORT	LC50			d	8.7685			95	20398
Endosulfan	Artemia salina, Brine shrimp	MOR	MOR	MORT	LC50	1		d	2.6885	mg/l		95	20398
Endosulfan	Brachionus plicatilis, Rotifer	MOR	MOR	MORT	LC50	1		d	6.6	mg/l		100	12646
Endosulfan	Brachionus plicatilis, Rotifer	MOR	MOR	MORT	LC50	1		d	7.2	mg/l		100	12646
Endosulfan	Brachionus plicatilis, Rotifer	MOR	MOR	MORT	LC50	1		d	5.6	mg/l		100	12646
Endosulfan	Callinectes sapidus, Blue crab	MOR	MOR	HTCH	EC50	1	5 TO 6	d	0.125	mg/l	mg/L	100	67659
Endosulfan	Callinectes sapidus, Blue crab	MOR	MOR	HTCH	EC50		5 TO 6	d	0.125		mg/L	100	67696
Endosulfan	Callinectes sapidus, Blue crab	MOR	MOR	HTCH	EC50		6 TO 8	d	0.45		mg/L	100	18705
Endosulfan	Cancer magister, Dungeness or edible crab	MOR	MOR	MORT	LC50			d	0.0148			100	3752
Endosulfan	Crangon sp., Caridean shrimp	MOR	MOR	MORT	LC50	4	4	d	0.0023 TO 0.0041	mg/l		100	2264
Endosulfan	Crangon sp., Caridean shrimp	MOR	MOR	MORT	LC50		4	d	0.00234 TO 0.00411	mg/l		100	3752
Endosulfan	Crassostrea madrasensis, Oyster	MOR	MOR	MORT	LETC			d	0.01413	mg/l		100	276
Endosulfan	Crassostrea madrasensis, Oyster	MOR	MOR	MORT	LETC	4		d	0.02054	mg/l		100	276
Endosulfan	Crassostrea madrasensis, Oyster	MOR	MOR	MORT	LETC	2		d	0.02724	mg/l		100	276
Endosulfan	Crassostrea madrasensis, Oyster	MOR	MOR	MORT	LETC	1		d	0.01258	mg/l		100	276
Endosulfan	Crassostrea madrasensis, Oyster	MOR	MOR	MORT	LETC	5		d	0.01809	mg/l		100	276
Endosulfan	Crassostrea madrasensis, Oyster	MOR	MOR	MORT	LC50	3		d	0.01413	mg/l		100	14270

Table H-4. Estuarine/Marine Invertebrate Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt 1	Endpt 2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Crassostrea virginica, American or virginia oyster	MOR	MOR	MORT	NOAE L			d	0.000285 TO 0.002988			100	73399
Endosulfan	Crassostrea virginica, American or virginia oyster	MOR	MOR	MORT	LC50	4		d	> 0.00164	mg/l		100	73399
Endosulfan	Dinophilus gyrociliatus, Archiannelid	MOR	MOR	MORT	LC50	4		d	1.878	mg/l		100	11940
Endosulfan	Dinophilus gyrociliatus, Archiannelid	MOR	MOR	MORT	LC50	1		d	1.403	mg/l		100	11940
Endosulfan	Dinophilus gyrociliatus, Archiannelid	MOR	MOR	MORT	LC50	2		d	0.9635	mg/l		100	11940
Endosulfan	Dinophilus gyrociliatus, Archiannelid	MOR	MOR	MORT	LC50	2		d	0.9335	mg/l		100	11940
Endosulfan	Dinophilus gyrociliatus, Archiannelid	MOR	MOR	MORT	LC50	3		d	0.9335	mg/l		100	11940
Endosulfan	Dinophilus gyrociliatus, Archiannelid	MOR	MOR	MORT	LC50	4		d	1.2	mg/l		100	11940
Endosulfan	Dinophilus gyrociliatus, Archiannelid	MOR	MOR	MORT	LC50	1		d	1.201	mg/l		100	11940
Endosulfan	Dinophilus gyrociliatus, Archiannelid	MOR	MOR	MORT	LC50	3		d	1.135	mg/l		100	11940
Endosulfan	Gammarus palustris, Gammarid amphipod	MOR	MOR	MORT	LC50	4		d	0.00153	mg/l		100	51439
Endosulfan	Gammarus palustris, Gammarid amphipod	MOR	MOR	MORT	LC50	3		d	0.00043	mg/l		100	51439
Endosulfan	Gammarus palustris, Gammarid amphipod	MOR	MOR	MORT	LC50	4		d	0.00054	mg/l		100	51439
Endosulfan	Gammarus palustris, Gammarid amphipod	MOR	MOR	MORT	LC50	4		d	0.00229	mg/l		100	51439
Endosulfan	Gammarus palustris, Gammarid amphipod	MOR	MOR	MORT	LC50	2		d	0.00563	mg/l		100	51439
Endosulfan	Gammarus palustris, Gammarid amphipod	MOR	MOR	MORT	LC50	2		d	0.00099	mg/l		100	51439
Endosulfan	Katelsia opima, Marine bivalve	MOR	MOR	MORT	LETC	3		d	0.01448	mg/l		100	276

Table H-4. Estuarine/Marine Invertebrate Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt 1	Endpt 2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Katelysia opima, Marine bivalve	MOR	MOR	MORT	LETC			d	0.01305			100	276
Endosulfan	Katelysia opima, Marine bivalve	MOR	MOR	MORT	LETC	5		d	0.01764	mg/l		100	276
Endosulfan	Katelysia opima, Marine bivalve	MOR	MOR	MORT	LETC	2		d	0.01422	mg/l		100	276
Endosulfan	Katelysia opima, Marine bivalve	MOR	MOR	MORT	LETC	4		d	0.02236	mg/l		100	276
Endosulfan	Litopenaeus stylirostris, Blue Shrimp	MOR	MOR	MORT	LC50	1		d	0.235	mg/l		100	73317
Endosulfan	Macrophthalmus erato, Mangrove crab	MOR	MOR	MORT	LC50	2		d	0.00048	mg/l		99.9	69820
Endosulfan	Meretrix casta, Bivalve	MOR	MOR	MORT	LETC	4	2	d	0.01675	mg/l	mg/L	100	276
Endosulfan	Meretrix casta, Bivalve	MOR	MOR	MORT	LETC		4	d	0.0152		mg/L	100	276
Endosulfan	Meretrix casta, Bivalve	MOR	MOR	MORT	LETC		5	d	0.01285		mg/L	100	276
Endosulfan	Meretrix casta, Bivalve	MOR	MOR	MORT	LETC		3	d	0.01611		mg/L	100	276
Endosulfan	Meretrix casta, Bivalve	MOR	MOR	MORT	LETC		1	d	0.0232		mg/L	100	276
Endosulfan	Nanosesarma sp., Crab	MOR	MOR	MORT	LC50		4	d	0.031		mg/L	100	18580
Endosulfan	Palaemonetes pugio, Daggerblade grass shrimp	MOR	MOR	MORT	LC50			d	0.00101			99	95846
Endosulfan	Palaemonetes pugio, Daggerblade grass shrimp	MOR	MOR	MORT	LC50	4		d	0.00256	mg/l		100	71986
Endosulfan	Palaemonetes pugio, Daggerblade grass shrimp	MOR	MOR	MORT	NOEC	LOE C 4	4	d	0.00063	0.00125 mg/l	mg/L	100	71986
Endosulfan	Palaemonetes pugio, Daggerblade grass shrimp	MOR	MOR	MORT	NOEC	LOE C	4	d	< 0.0125	0.0125	mg/L	100	71986
Endosulfan	Palaemonetes pugio, Daggerblade grass shrimp	MOR	MOR	MORT	LC50			d	0.117			100	71986

Table H-4. Estuarine/Marine Invertebrate Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt 1	Endpt 2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Palaemonetes pugio, Daggerblade grass shrimp	MOR	MOR	MORT	LC50			d	0.00062			100	61089
Endosulfan	Palaemonetes pugio, Daggerblade grass shrimp	MOR	MOR	MORT	LC50	4		d	0.00092	mg/l		100	61089
Endosulfan	Palaemonetes pugio, Daggerblade grass shrimp	MOR	MOR	MORT	LC50	4	4	d	0.000206	mg/l	mg/L	100	61089
Endosulfan	Palaemonetes pugio, Daggerblade grass shrimp	MOR	MOR	MORT	LC15		4	d	0.00009 TO 0.000329			100	61089
Endosulfan	Palaemonetes pugio, Daggerblade grass shrimp	MOR	MOR	MORT	LC15		4	d	0.000239 TO 0.000907	mg/l		100	61089
Endosulfan	Palaemonetes pugio, Daggerblade grass shrimp	MOR	MOR	HTCH	LOAE L			d	0.0002	mg/l	mg/L	100	61089
Endosulfan	Palaemonetes pugio, Daggerblade grass shrimp	MOR	MOR	MORT	NR-ZERO	35	35	d	0.0002		mg/L	100	61089
Endosulfan	Palaemonetes pugio, Daggerblade grass shrimp	MOR	MOR	MORT	NR-ZERO		35	d	0.0002		mg/L	100	61089
Endosulfan	Palaemonetes pugio, Daggerblade grass shrimp	MOR	MOR	MORT	NR-ZERO		35	d	0.0002		mg/L	100	61089
Endosulfan	Palaemonetes pugio, Daggerblade grass shrimp	MOR	MOR	MORT	NR-ZERO		35	d	0.0002		mg/L	100	61089
Endosulfan	Palaemonetes pugio, Daggerblade grass shrimp	MOR	MOR	MORT	NR-ZERO		35	d	0.0002		mg/L	100	61089
Endosulfan	Palaemonetes pugio, Daggerblade grass shrimp	MOR	MOR	MORT	LC50			d	0.00028			100	3726
Endosulfan	Palaemonetes pugio, Daggerblade grass shrimp	MOR	MOR	MORT	LC50	4		d	0.00018	mg/l		100	3726
Endosulfan	Palaemonetes pugio, Daggerblade grass shrimp	MOR	MOR	MORT	LC50	4		d	0.00031	mg/l		100	3726
Endosulfan	Palaemonetes pugio, Daggerblade grass shrimp	MOR	MOR	MORT	NR-ZERO	4	2	d	0.000003	mg/l	mg/L	100	2202
Endosulfan	Palaemonetes pugio, Daggerblade grass shrimp	MOR	MOR	MORT	NR-LETH		2	d	0.000249		mg/L	100	2202
Endosulfan	Palaemonetes pugio, Daggerblade grass shrimp	MOR	MOR	MORT	LC50			d	0.00131			100	5882

Table H-4. Estuarine/Marine Invertebrate Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt 1	Endpt 2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Palaemonetes pugio, Daggerblade grass shrimp	MOR	MOR	MORT	LC50		0.25	d	0.004042		mg/L	100	8613
Endosulfan	Palaemonetes pugio, Daggerblade grass shrimp	MOR	MOR	MORT	LC50		4	d	0.000513		mg/L	100	8613
Endosulfan	Palaemonetes pugio, Daggerblade grass shrimp	MOR	MOR	MORT	LC50			d	0.00063			100	8613
Endosulfan	Palaemonetes pugio, Daggerblade grass shrimp	MOR	MOR	MORT	LC50		4	d	0.000645		mg/L	100	8613
Endosulfan	Palaemonetes pugio, Daggerblade grass shrimp	MOR	MOR	MORT	LC50	4	4	d	0.000303		mg/L	100	8613
Endosulfan	Palaemonetes pugio, Daggerblade grass shrimp	MOR	MOR	MORT	LC50		4	d	0.001397		mg/L	100	8613
Endosulfan	Palaemonetes pugio, Daggerblade grass shrimp	MOR	MOR	MORT	LC50			d	0.00073			100	8613
Endosulfan	Palaemonetes pugio, Daggerblade grass shrimp	MOR	MOR	MORT	LC50	4		d	0.00039		mg/l	100	8613
Endosulfan	Palaemonetes pugio, Daggerblade grass shrimp	MOR	MOR	MORT	LC50	4	4	d	0.001342		mg/L	100	8613
Endosulfan	Palaemonetes pugio, Daggerblade grass shrimp	MOR	MOR	MORT	LC50		4	d	0.000894		mg/L	100	8613
Endosulfan	Palaemonetes pugio, Daggerblade grass shrimp	MOR	MOR	MORT	LC50		4	d	0.000911		mg/L	100	8613
Endosulfan	Palaemonetes pugio, Daggerblade grass shrimp	MOR	MOR	MORT	LC50		4	d	0.000583		mg/L	100	8613
Endosulfan	Palaemonetes pugio, Daggerblade grass shrimp	MOR	MOR	MORT	NOEC		0.25	d	0.001118		mg/L	100	8613
Endosulfan	Palaemonetes pugio, Daggerblade grass shrimp	MOR	MOR	MORT	NOEC		4	d	0.000032		mg/L	100	8613
Endosulfan	Palaemonetes pugio, Daggerblade grass shrimp	MOR	MOR	MORT	LC50		0.25	d	0.00381		mg/L	100	8613
Endosulfan	Palaemonetes pugio, Daggerblade grass shrimp	MOR	MOR	MORT	NOEC		0.25	d	<=1.118		mg/L	100	8613
Endosulfan	Palaemonetes pugio, Daggerblade grass shrimp	MOR	MOR	MORT	LC50		4	d	0.000337		mg/L	100	8613

Table H-4. Estuarine/Marine Invertebrate Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt 1	Endpt 2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Palaemonetes pugio, Daggerblade grass shrimp	MOR	MOR	MORT	LC50		4	d	0.000563		mg/L	100	8613
Endosulfan	Palaemonetes pugio, Daggerblade grass shrimp	MOR	MOR	MORT	LC50			d	0.00096			100	8613
Endosulfan	Palaemonetes pugio, Daggerblade grass shrimp	MOR	MOR	MORT	LC50	4		d	0.0014	mg/l		100	8613
Endosulfan	Palaemonetes pugio, Daggerblade grass shrimp	MOR	MOR	MORT	LC50	4		d	0.00062	mg/l		100	8613
Endosulfan	Palaemonetes pugio, Daggerblade grass shrimp	MOR	MOR	MORT	NOEC	4		d	<=0.032	mg/l		100	8613
Endosulfan	Palaemonetes pugio, Daggerblade grass shrimp	MOR	MOR	MORT	LC50	4	0.25	d	0.004063	mg/l	mg/L	100	8613
Endosulfan	Palaemonetes pugio, Daggerblade grass shrimp	MOR	MOR	MORT	LC50		4	d	0.000641		mg/L	100	8613
Endosulfan	Palaemonetes pugio, Daggerblade grass shrimp	MOR	MOR	MORT	LC50		0.25	d	0.00453		mg/L	100	18932
Endosulfan	Palaemonetes pugio, Daggerblade grass shrimp	MOR	MOR	MORT	LC50			d	0.00101			100	18932
Endosulfan	Palaemonetes pugio, Daggerblade grass shrimp	MOR	MOR	MORT	LC50	4	0.25	d	0.0076	mg/l	mg/L	100	18932
Endosulfan	Palaemonetes pugio, Daggerblade grass shrimp	MOR	MOR	MORT	LC50			d	0.00096			100	18932
Endosulfan	Palaemonetes pugio, Daggerblade grass shrimp	MOR	MOR	MORT	LC50	4	0.25	d	0.00435	mg/l	mg/L	100	18932
Endosulfan	Palaemonetes pugio, Daggerblade grass shrimp	MOR	MOR	MORT	LC50			d	0.00097			100	18932
Endosulfan	Palaemonetes pugio, Daggerblade grass shrimp	MOR	MOR	SURV	LOAE L	4	50	d	0.0001344	mg/l	mg/L	98.6	103257
Endosulfan	Palaemonetes pugio, Daggerblade grass shrimp	MOR	MOR	SURV	NOAE L		50	d	0.0002491		mg/L	98.6	103257
Endosulfan	Palaemonetes pugio, Daggerblade grass shrimp	MOR	MOR	SURV	NOAE L			d	0.000243		mg/L	98.6	103257
Endosulfan	Palaemonetes pugio, Daggerblade grass shrimp	MOR	MOR	SURV	NOAE L	LOAE L ₅₀	50	d	0.0000974	0.00024 ₃	mg/L	98.6	103257

Table H-4. Estuarine/Marine Invertebrate Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt 1	Endpt 2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Palaemonetes pugio, Daggerblade grass shrimp	MOR	MOR	MORT	LC50			d	0.00012			100	73399
Endosulfan	Penaeus duorarum, Northern pink shrimp	MOR	MOR	MORT	LC50	4		d	0.00004	mg/l		100	5882
Endosulfan	Penaeus sp., Penaeidean shrimp	MOR	MOR	MORT	LC50	4		d	0.00018	mg/l		100	3726
Endosulfan	Penaeus sp., Penaeidean shrimp	MOR	MOR	MORT	LC50	2		d	0.00031	mg/l		100	3726
Endosulfan	Sagitta sp., Chaetognaths	MOR	MOR	MORT	LC50	2	1	d	0.424	mg/l	mg/L	100	2658
Endosulfan	Strongylocentrotus droebachiensis, Green sea urchin	MOR	MOR	MORT	LC50			d	>4.54			100	3752
Endosulfan	Uca pugilator, Fiddler crab	MOR	MOR	MORT	NOAE L	4		d	0.000285 TO 0.002988	mg/L		100	73399
Endosulfan	Uca pugilator, Fiddler crab	MOR	MOR	MORT	LC50	4	4	d	> 0.00164	mg/l	mg/L	100	73399
Endosulfan	Villorita cyprinoides, Bivalve	MOR	MOR	MORT	NR-ZERO		4	d	0.21		mg/L	35	60150
Endosulfan	Cancer magister, Dungeness or edible crab	PHY	ITX	IMBL	EC50			d	0.015			100	2264
Endosulfan	Acropora millepora, Coral	REP	REP	FERZ	NOEC	LOE C ₄	0.125	d	0.03	0.03 mg/l	mg/L	100	100575
Endosulfan	Acropora millepora, Coral	REP	REP	FERZ	EC50		0.125	d	>0.030		mg/L	100	100575
Endosulfan	Americamysis bahia, Opossum shrimp	REP	REP	RSUC	NOAE L	LOAE L	28	d	0.00033	0.00071	mg/L	100	103180
Endosulfan	Americamysis bahia, Opossum shrimp	REP	REP	GREP	MATC		28	d	0.00036		mg/L	100	3736
Endosulfan	Americamysis bahia, Opossum shrimp	REP	REP	GREP	MATC		28	d	0.0005		mg/L	100	3736
Endosulfan	Americamysis bahia, Opossum shrimp	REP	REP	GREP	MATC		28	d	0.00048		mg/L	100	3736
Endosulfan	Americamysis bahia, Opossum shrimp	REP	REP	GREP	MATC		28	d	0.00033 TO 0.00071			100	3750

mg/L

Table H-4. Estuarine/Marine Invertebrate Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt 1	Endpt 2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Americamysis bahia, Opossum shrimp	REP	REP	GREP	MATC		28	d	0.001		mg/L	100	11871
Endosulfan	Crassostrea gigas, Pacific oyster	REP	REP	FERZ	EC50		0.04	d	0.2148		mg/L	100	3752
Endosulfan	Dendraster excentricus, Sand dollar	REP	REP	FERZ	EC50		0.04	d	0.3148		mg/L	100	3752
Endosulfan	Dendraster excentricus, Sand dollar	REP	REP	FERZ	EC50		0.04	d	0.2173		mg/L	100	3752
Endosulfan	Dendraster excentricus, Sand dollar	REP	REP	FERZ	EC50		0.04	d	0.5458		mg/L	100	3752
Endosulfan	Dendraster excentricus, Sand dollar	REP	REP	FERZ	EC50		0.04	d	0.3467		mg/L	100	3752
Endosulfan	Dendraster excentricus, Sand dollar	REP	REP	GREP	EC50		0.02	d	0.165		mg/L	100	10299
Endosulfan I	Dendraster excentricus, Sand dollar	REP	REP	GREP	EC50		0.04	d	0.269		mg/L	100	10299
Endosulfan	Dendraster excentricus, Sand dollar	REP	REP	GREP	EC50		0.08	d	0.08		mg/L	100	10299
Endosulfan	Dendraster excentricus, Sand dollar	REP	REP	GREP	EC50		0.02	d	0.227		mg/L	100	10299
Endosulfan sulphate	Dendraster excentricus, Sand dollar	REP	REP	GREP	EC50		0.04	d	0.212		mg/L	100	10299
Endosulfan	Dendraster excentricus, Sand dollar	REP	REP	GREP	EC50		0.02	d	0.234		mg/L	100	10299
Endosulfan	Dendraster excentricus, Sand dollar	REP	REP	GREP	EC50		0.02	d	0.107		mg/L	100	10299
Endosulfan	Dendraster excentricus, Sand dollar	REP	REP	GREP	EC50		0.02	d	0.15		mg/L	100	10299
Endosulfan	Dendraster excentricus, Sand dollar	REP	REP	GREP	EC50		0.04	d	0.322		mg/L	100	10299
Endosulfan	Dendraster excentricus, Sand dollar	REP	REP	GREP	EC50		0.02	d	0.226		mg/L	100	10299
Endosulfan II	Dendraster excentricus, Sand dollar	REP	REP	GREP	EC50		0.04	d	0.06		mg/L	100	10299

Table H-4. Estuarine/Marine Invertebrate Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt 1	Endpt 2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Dendraster excentricus, Sand dollar	REP	REP	GREP	EC50		0.02	d	0.238		mg/L	100	10299
Endosulfan	Dendraster excentricus, Sand dollar	REP	REP	GREP	EC50		0.06	d	0.103		mg/L	100	10299
Endosulfan	Dendraster excentricus, Sand dollar	REP	REP	GREP	EC50		0.02	d	0.201		mg/L	100	10299
Endosulfan	Dendraster excentricus, Sand dollar	REP	REP	GREP	EC50		0.02	d	<0.068		mg/L	100	10299
Endosulfan	Dendraster excentricus, Sand dollar	REP	REP	GREP	EC50		0.02	d	0.147		mg/L	100	10299
Endosulfan	Dendraster excentricus, Sand dollar	REP	REP	GREP	EC50		0.04	d	0.147		mg/L	100	10299
Endosulfan	Dendraster excentricus, Sand dollar	REP	REP	GREP	EC50		0.02	d	0.156		mg/L	100	10299
Endosulfan	Dendraster excentricus, Sand dollar	REP	REP	GREP	EC50		0.04	d	0.316		mg/L	100	10299
Endosulfan	Dendraster excentricus, Sand dollar	REP	REP	GREP	EC50		0.02	d	0.115		mg/L	100	10299
Endosulfan	Dendraster excentricus, Sand dollar	REP	REP	GREP	EC50		0.04	d	0.225		mg/L	100	10299
Endosulfan	Dendraster excentricus, Sand dollar	REP	REP	GREP	EC50		0.02	d	0.264		mg/L	100	10299
Endosulfan	Palaemonetes pugio, Daggerblade grass shrimp	REP	REP	PREG	NOAE L		50	d	0.0002491		mg/L	98.6	103257
Endosulfan	Palaemonetes pugio, Daggerblade grass shrimp	REP	REP	PREG	NOAE L			d	0.000243		mg/L	98.6	103257
Endosulfan	Strongylocentrotus droebachiensis, Green sea urchin	REP	REP	GREP	EC50	50	0.05	d	0.502		mg/L	100	2264
Endosulfan	Strongylocentrotus droebachiensis, Green sea urchin	REP	REP	FERZ	EC50		0.04	d	0.7798		mg/L	100	3752
Endosulfan	Strongylocentrotus droebachiensis, Green sea urchin	REP	REP	FERZ	EC50		0.04	d	0.5023		mg/L	100	3752

Table H-4. Estuarine/Marine Invertebrate Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt 1	Endpt 2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Strongylocentrotus droebachiensis, Green sea urchin	REP	REP	GREP	EC50		0.06	d	< 0.066		mg/L	100	10299
Endosulfan	Strongylocentrotus droebachiensis, Green sea urchin	REP	REP	GREP	EC50		0.08	d	0.164		mg/L	100	10299
Endosulfan	Strongylocentrotus droebachiensis, Green sea urchin	REP	REP	GREP	EC50		0.02	d	< 0.083		mg/L	100	10299
Endosulfan	Strongylocentrotus droebachiensis, Green sea urchin	REP	REP	GREP	EC50		0.02	d	0.099		mg/L	100	10299
Endosulfan	Strongylocentrotus droebachiensis, Green sea urchin	REP	REP	GREP	EC50		0.02	d	< 0.084		mg/L	100	10299
Endosulfan	Strongylocentrotus droebachiensis, Green sea urchin	REP	REP	GREP	EC50		0.04	d	>0.751		mg/L	100	10299
Endosulfan	Strongylocentrotus droebachiensis, Green sea urchin	REP	REP	GREP	EC50		0.02	d	0.13		mg/L	100	10299
Endosulfan	Strongylocentrotus droebachiensis, Green sea urchin	REP	REP	GREP	EC50		0.02	d	0.46		mg/L	100	10299
Endosulfan	Strongylocentrotus droebachiensis, Green sea urchin	REP	REP	GREP	EC50		0.04	d	0.168		mg/L	100	10299
Endosulfan	Strongylocentrotus droebachiensis, Green sea urchin	REP	REP	GREP	EC50		0.02	d	0.358		mg/L	100	10299
Endosulfan	Strongylocentrotus droebachiensis, Green sea urchin	REP	REP	GREP	EC50		0.02	d	0.321		mg/L	100	10299
Endosulfan	Strongylocentrotus droebachiensis, Green sea urchin	REP	REP	GREP	EC50		0.02	d	0.637		mg/L	100	10299
Endosulfan	Strongylocentrotus droebachiensis, Green sea urchin	REP	REP	GREP	EC50		0.02	d	0.556		mg/L	100	10299
Endosulfan	Strongylocentrotus droebachiensis, Green sea urchin	REP	REP	GREP	EC50		0.02	d	0.766		mg/L	100	10299
Endosulfan	Strongylocentrotus droebachiensis, Green sea urchin	REP	REP	GREP	EC50		0.02	d	0.252		mg/L	100	10299

Table H-4. Estuarine/Marine Invertebrate Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt 1	Endpt 2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	<i>Strongylocentrotus droebachiensis</i> , Green sea urchin	REP	REP	GREP	EC50		0.04	d	0.168		mg/L	100	10299
Endosulfan	<i>Strongylocentrotus droebachiensis</i> , Green sea urchin	REP	REP	GREP	EC50		0.02	d	0.14		mg/L	100	10299
Endosulfan	<i>Strongylocentrotus droebachiensis</i> , Green sea urchin	REP	REP	GREP	EC50		0.02	d	0.358		mg/L	100	10299
Endosulfan	<i>Strongylocentrotus purpuratus</i> , Purple sea urchin	REP	REP	GREP	EC50		0.05	d	0.081		mg/L	100	2264
Endosulfan	<i>Strongylocentrotus purpuratus</i> , Purple sea urchin	REP	REP	FERZ	EC50		0.04	d	0.5689		mg/L	100	3752
Endosulfan	<i>Strongylocentrotus purpuratus</i> , Purple sea urchin	REP	REP	FERZ	EC50		0.04	d	0.0809		mg/L	100	3752

Table H-5. Aquatic-phase amphibians data from ECOTOX. Data are arranged in alphabetical order by Effect Group. The code list for ECOTOX can be found at: <http://cfpub.epa.gov/ecotox/blackbox/help/codelist.pdf>.

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt 2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	<i>Notophthalmus viridescens</i> , Salamander	BCM	HRM	TSTR	NOAEL		4	d	0.00495		mg/L	99	103237
Endosulfan	<i>Ambystoma barbouri</i> , Streamside salamander	BEH	BEH	ACTV	NOAEL	LOAEL	53	d	0.00099	0.0099	mg/L	99	71723
Endosulfan	<i>Ambystoma barbouri</i> , Streamside salamander	BEH	BEH	ACTV	NOAEL	LOAEL	53	d	0.00099	0.0099	mg/L	99	71723
Endosulfan	<i>Limnodynastes peroni</i> , Brown Striped Marsh Frog	BEH	FDB	FDN G	LOAEL		2	d	0.00003		mg/L	100	73400
Endosulfan	<i>Limnodynastes peroni</i> , Brown Striped Marsh Frog	BEH	FDB	FDN G	LOAEL		2	d	0.00003		mg/L	100	73400
Endosulfan	<i>Limnodynastes peroni</i> , Brown Striped Marsh Frog	BEH	BEH	PRVU	LOAEL		>=37	d	0.00003		mg/L	100	73400

Table H-5. Aquatic Amphibian Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt 2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	<i>Limnodynastes peroni</i> , <i>Brown Striped Marsh Frog</i>	BEH	BEH	PRVU	LOAEL		>=37	d	0.00003		mg/L	100	73400
Endosulfan	<i>Litoria citropa</i> , <i>Tree Frog</i>	BEH	BEH	PRVU	LOAEL		28	d	0.0008		mg/L	100	65732
Endosulfan	<i>Litoria freycineti</i> , <i>Wallum Rocket Frog</i>	BEH	FDB	FCNS	NOAEL	LOAEL	2	d	0.00003	0.0013	mg/L	100	71866
Endosulfan	<i>Litoria freycineti</i> , <i>Wallum Rocket Frog</i>	BEH	BEH	SWIM	NOAEL		4	d	0.0013		mg/L	100	71866
Endosulfan	<i>Litoria freycineti</i> , <i>Wallum Rocket Frog</i>	BEH	BEH	PRVU	LOAEL		4	d	0.0013		mg/L	100	71866
Endosulfan	<i>Notophthalmus viridescens</i> , <i>Salamander</i>	BEH	BEH	RSPT	NOAEL		4	d	0.00495		mg/L	99	103237
Endosulfan	<i>Hyla pulchella</i> , <i>Montevideo tree frog</i>	CEL	GEN	MNU C	NOAEL	LOAEL	2	d	0.000875	0.00175	mg/L	35	86681
Endosulfan	<i>Hyla pulchella</i> , <i>Montevideo tree frog</i>	CEL	GEN	MNU C	NOAEL	LOAEL	4	d	0.000875	0.00175	mg/L	35	86681
Endosulfan	<i>Ambystoma barbouri</i> , <i>Streamside salamander</i>	GRO	GRO	LGTH	NOAEL	LOAEL	50	d	0.00099	0.0099	mg/L	99	71723
Endosulfan	<i>Ambystoma barbouri</i> , <i>Streamside salamander</i>	GRO	DVP	EMR G	NOAEL		~13	d	0.0099		mg/L	99	71723
Endosulfan	<i>Limnodynastes peroni</i> , <i>Brown Striped Marsh Frog</i>	GRO	GRO	LGTH	LOAEL		17	d	0.00003		mg/L	100	73400
Endosulfan	<i>Limnodynastes peroni</i> , <i>Brown Striped Marsh Frog</i>	GRO	GRO	LGTH	LOAEL		17	d	0.00003		mg/L	100	73400
Endosulfan	<i>Limnodynastes peroni</i> , <i>Brown Striped Marsh Frog</i>	GRO	MPH	LGTH	LOAEL		17	d	0.00003		mg/L	100	73400
Endosulfan	<i>Limnodynastes peroni</i> , <i>Brown Striped Marsh Frog</i>	GRO	MPH	LGTH	LOAEL		17	d	0.00003		mg/L	100	73400
Endosulfan	<i>Litoria freycineti</i> , <i>Wallum Rocket Frog</i>	GRO	GRO	LGTH	NOAEL		4	d	0.0013		mg/L	100	71866
Endosulfan	<i>Notophthalmus viridescens</i> , <i>Salamander</i>	GRO	MPH	AREA	LOAEL		4	d	0.000495		mg/L	99	103237
Endosulfan	<i>Notophthalmus viridescens</i> , <i>Salamander</i>	GRO	GRO	WGHT T	NOAEL		4	d	0.00495		mg/L	99	103237

Table H-5. Aquatic Amphibian Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt 2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	<i>Rana clamitans</i> , Green frog	GRO	DVP	DFR M	EC50		16	d	2.43		mg/L	47	19300
Endosulfan	<i>Ambystoma barbouri</i> , Streamside salamander	MOR	MOR	SURV	NOAEL	LOAEL	50	d	0.00099	0.0099	mg/L	99	71723
Endosulfan	<i>Bufo americanus</i> , American toad	MOR	MOR	SURV	NR-ZERO		2	d	0.02209 TO 1.1045		mg/L	47	49995
Endosulfan	<i>Bufo bufo</i> , Common or european toad	MOR	MOR	MOR T	LC50		4	d	0.4257		mg/L	99	103223
Endosulfan	<i>Bufo bufo</i> , Common or european toad	MOR	MOR	MOR T	NR-ZERO			d	0.099		mg/L	99	103223
Endosulfan	<i>Bufo bufo</i> , Common or european toad	MOR	MOR	MOR T	LC01		4	d	0.14751		mg/L	99	103223
Endosulfan	<i>Bufo bufo</i> , Common or european toad	MOR	MOR	MOR T	LC5	4	4	d	0.20097		mg/L	99	103223
Endosulfan	<i>Bufo bufo</i> , Common or european toad	MOR	MOR	MOR T	LC10		4	d	0.2376		mg/L	99	103223
Endosulfan	<i>Bufo bufo</i> , Common or european toad	MOR	MOR	MOR T	LC15		4	d	0.26532		mg/L	99	103223
Endosulfan	<i>Bufo bufo</i> , Common or european toad	MOR	MOR	MOR T	LC85		4	d	0.68211		mg/L	99	103223
Endosulfan	<i>Bufo bufo</i> , Common or european toad	MOR	MOR	MOR T	LC90		4	d	0.76329		mg/L	99	103223
Endosulfan	<i>Bufo bufo</i> , Common or european toad	MOR	MOR	MOR T	LC95		4	d	0.89991		mg/L	99	103223
Endosulfan	<i>Bufo bufo</i> , Common or european toad	MOR	MOR	MOR T	LC99		4	d	1.2276		mg/L	99	103223
Endosulfan	<i>Limnodynastes peroni</i> , Brown Striped Marsh Frog	MOR	MOR	MOR T	NR-ZERO			d	0.0013		mg/L	100	73400
Endosulfan	<i>Limnodynastes peroni</i> , Brown Striped Marsh Frog	MOR	MOR	MOR T	NR-ZERO			d	0.0013		mg/L	100	73400
Endosulfan	<i>Litoria citropa</i> , Tree Frog	MOR	MOR	SVVS	LOAEL		4	d	0.0008		mg/L	100	65732
Endosulfan	<i>Litoria citropa</i> , Tree Frog	MOR	MOR	SVVS	LOAEL		4	d	0.0008		mg/L	100	65732

Table H-5. Aquatic Amphibian Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt 2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	<i>Litoria freycineti</i> , Wallum Rocket Frog	MOR	MOR	SURV	NR-ZERO			d	0.00003		mg/L	100	71866
Endosulfan	<i>Rana clamitans</i> , Green frog	MOR	MOR	MOR T	LC50	4	13	d	0.015		mg/L	47	19300
Endosulfan	<i>Rana clamitans</i> , Green frog	MOR	MOR	MOR T	LC50		4	d	> 4.7		mg/L	47	19300
Endosulfan	<i>Rana clamitans</i> , Green frog	MOR	MOR	MOR T	LC50		16	d	0.015		mg/L	47	19300
Endosulfan	<i>Rana clamitans</i> , Green frog	MOR	MOR	MOR T	LC50		4	d	> 11.75		mg/L	47	19300
Endosulfan	<i>Rana pipiens</i> , Leopard frog	MOR	MOR	SURV	NR-LETH			d	2.209		mg/L	47	49995
Endosulfan	<i>Rana tigrina</i> , Tiger frog, indian bullfrog	MOR	MOR	MOR T	LC50	2	6	d	0.0007		mg/L	100	61878
Endosulfan	<i>Notophthalmus viridescens</i> , Salamander	REP	REP	RSU C	LOAEL		4	d	0.000495		mg/L	99	103237

Table H-6. Aquatic-plant data from ECOTOX. Data are arranged in alphabetical order by Effect Group. The code list for ECOTOX can be found at: <http://cfpub.epa.gov/ecotox/blackbox/help/codelist.pdf>.

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	<i>Anabaena sp.</i> , Blue-green algae	ACC	ACC	GACC	BCF		2	d	1		mg/L	100	14044
Endosulfan	<i>Anabaena sp.</i> , Blue-green algae	ACC	ACC	GACC	BCF		2	d	0.1		mg/L	100	14044
Endosulfan	<i>Anabaena sp.</i> , Blue-green algae	ACC	ACC	GACC	BCF		2	d	0.5		mg/L	100	14044
Endosulfan	<i>Aulosira fertilissima</i> , Blue-green algae	ACC	ACC	GACC	BCF		2	d	1		mg/L	100	14044

Table H-6. Aquatic Plant Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	<i>Aulosira fertilissima</i> , Blue-green algae	ACC	ACC	GACC	BCF		2	d	0.5		mg/L	100	14044
Endosulfan	<i>Aulosira fertilissima</i> , Blue-green algae	ACC	ACC	GACC	BCF		2	d	0.1		mg/L	100	14044
Endosulfan	<i>Pseudokirchneriella subcapitata</i> , Green algae	ACC	ACC	RSDE	BCF		0.67	d	92.5		ng	100	65915
Endosulfan	<i>Anabaena doliolum</i> , Blue-green algae	BCM	BCM	CHLO	NOAEL	LOAEL	16	d	1	2	mg/L	100	104607
Endosulfan	<i>Myriophyllum quitense</i> , Andean water milfoil	BCM	ENZ	CTLS	NOAEL	LOAEL	1	d	0.00002	0.0005	mg/L	100	103595
Endosulfan	<i>Myriophyllum quitense</i> , Andean water milfoil	BCM	ENZ	GSTR	NOAEL	LOAEL	1	d	0.00002	0.0005	mg/L	100	103595
Endosulfan	<i>Myriophyllum quitense</i> , Andean water milfoil	BCM	ENZ	GSTR	NOAEL	LOAEL	1	d	0.00002	0.0005	mg/L	100	103595
Endosulfan	<i>Myriophyllum quitense</i> , Andean water milfoil	BCM	ENZ	GLRE	NOAEL	LOAEL	1	d	0.0005	0.005	mg/L	100	103595
Endosulfan	<i>Myriophyllum quitense</i> , Andean water milfoil	BCM	BCM	H2O2	NOAEL	LOAEL	1	d	0.0005	0.005	mg/L	100	103595
Endosulfan	<i>Plectonema boryanum</i> , Blue-green algae	BCM	BCM	PHYC	LOAEL		6	d	10		mg/L	100	104489
Endosulfan	<i>Plectonema boryanum</i> , Blue-green algae	BCM	ENZ	CTLS	LOAEL		1	d	5		mg/L	100	104489
Endosulfan	<i>Bidens laevis</i> , Smooth Beggarticks	CEL	GEN	CABR	NOAEL	LOAEL	3	d	0.0005	0.005	mg/L	100	103212
Endosulfan	<i>Gymnodinium mikimotoi</i> , Dinoflagellate	CEL	GEN	DAMG	LOAEL		1	d	0.001		mg/L	100	103387
Endosulfan	<i>Anabaena doliolum</i> , Blue-green algae	GRO	GRO	GGRO	EC50		10	d	2.15		mg/L	100	3418
Endosulfan	<i>Champia parvula</i> , Red algae	GRO	GRO	GGRO	MATC		11 TO 14	d	<47		mg/L	100	11452
Endosulfan	<i>Chlorella vulgaris</i> , Green algae	GRO	GRO	GGRO	EC50		10	d	41.5		mg/L	100	3418
Endosulfan	<i>Anabaena doliolum</i> , Blue-green algae	MOR	MOR	MORT	LC50		10	d	2.15		mg/L	100	104607

Table H-6. Aquatic Plant Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	<i>Anabaena doliolum</i> , Blue-green algae	MOR	MOR	MORT	NR-LETH			d	5		mg/L	100	104607
Endosulfan	<i>Plectonema boryanum</i> , Blue-green algae	PHY	PHY	OXYG	LOAEL		6	d	5		mg/L	100	104489
Endosulfan	<i>Anabaena doliolum</i> , Blue-green algae	POP	POP	PGRT	NOAEL	LOAEL	16	d	0.5	1	mg/L	100	104607
Endosulfan	<i>Anabaena fertilissima</i> , Blue-green algae	POP	POP	PGRT	EC50		15	d	0.00735		mg/L	35	75042
Endosulfan	<i>Anabaena variabilis</i> , Blue-green algae	POP	POP	PGRT	EC50		15	d	0.00455		mg/L	35	75042
Endosulfan	<i>Calothrix parietina</i> , Blue-green algae	POP	POP	PGRT	EC50		15	d	0.0182		mg/L	35	75042
Endosulfan	<i>Calothrix sp.</i> , Blue-green algae	POP	POP	PGRT	EC50		15	d	0.0189		mg/L	35	75042
Endosulfan	<i>Nostoc linckia</i> , Blue-green algae	POP	POP	PGRT	EC50		15	d	0.00735		mg/L	35	75042
Endosulfan	<i>Nostoc muscorum</i> , Blue-green algae	POP	POP	PGRT	EC50		15	d	0.00525		mg/L	35	75042
Endosulfan	<i>Nostoc spaericum</i> , Blue-green algae	POP	POP	PGRT	EC50		15	d	0.00525		mg/L	35	75042
Endosulfan	NR NR, Dinoflagellate algae division	POP	POP	PSYN	NOAEL	LOAEL	4	d	0.001	0.01	mg/L	100	100575
Endosulfan	NR NR, NR	POP	POP	DVRS	LOAEL		1	d	0.00038 TO 0.00125			100	88194
Endosulfan	NR NR, Plant kingdom	POP	POP	ABND	LOAEL		1	d	0.00038 TO 0.00125	mg/L		100	88194
Endosulfan	NR NR, Diatom division	POP	POP	ABND	LOAEL		1	d	0.00038 TO 0.00125	mg/L		100	88194
Endosulfan	<i>Pseudokirchneriella subcapitata</i> , Green algae	POP	POP	ABND	EC50		4	d	0.4278	mg/L	mg/L	100	65915
Endosulfan	<i>Pseudokirchneriella subcapitata</i> , Green algae	POP	POP	ABND	NOEC	LOEC	4	d	0.13	0.216	mg/L	100	65915
Endosulfan	<i>Scytonema sp.</i> , Blue-green algae	POP	POP	PGRT	EC50		15	d	0.0077		mg/L	35	75042

Table H-6. Aquatic Plant Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	<i>Scytonema sp., Blue-green algae</i>	POP	POP	PGRT	EC50		15	d	0.01785		mg/L	35	75042
Endosulfan	<i>Westiellopsis sp., Blue-green algae</i>	POP	POP	PGRT	EC50		15	d	0.00805		mg/L	35	75042

Table H-7 . Bird data from ECOTOX. Data are arranged in alphabetical order by Effect Group. The code list for ECOTOX can be found at: <http://cfpub.epa.gov/ecotox/blackbox/help/codelist.pdf>.

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan I	Gallus domesticus, Domestic Chicken	BCM	ENZ	ACHE	LOAEL		1	d	2		ug/egg	100	80315
Endosulfan	Gallus domesticus, Domestic Chicken	BCM	ENZ	ALPH	LOAEL		60	d	2		ppm	100	93216
Endosulfan	Gallus domesticus, Domestic Chicken	BCM	BCM	PRTL	LOAEL		60	d	2		ppm	100	93216
Endosulfan	Gallus domesticus, Domestic Chicken	BCM	ENZ	ACHE	LOAEL		60	d	2		ppm	100	103496
Endosulfan	Gallus domesticus, Domestic Chicken	BCM	BCM	GLUC	LOAEL		60	d	2		ppm	100	103496
Endosulfan	Gallus domesticus, Domestic Chicken	BCM	BCM	HMGL	LOAEL		49	d	2		ppm	100	89390
Endosulfan	Gallus domesticus, Domestic Chicken	BCM	ENZ	ALAS	NOAEL		0.21	d	0.25		mg/org	94	89476
Endosulfan	Gallus domesticus, Domestic Chicken	BCM	ENZ	ALAS	NOAEL		0.063	d	9		mg/org	94	89476
Endosulfan	Gallus domesticus, Domestic Chicken	BCM	BCM	PORP	NOAEL	LOAEL	1	d	0.25	0.5	mg/org	94	89476
Endosulfan	Gallus domesticus, Domestic Chicken	BCM	ENZ	G6PT	LOAEL		14	d	5		ppm	100	59008
Endosulfan	Gallus domesticus, Domestic Chicken	BCM	BCM	PYRV	NOAEL	LOAEL	14	d	500	1000	ppm	100	59008

Table H-7 Bird Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Agelaius phoeniceus, red-winged blackbird	BEH	FDB	FCNS	NOAEL		4	d	2		ml/kg	100	92506
Endosulfan	Merops pusillus, Little Bee-eater	BEH	BEH	FLIT	LOAEL		3	d	6.65		g/ha	35	103365
Endosulfan	Merops pusillus, Little Bee-eater	BEH	FDB	FCNS	LOAEL		1	d	7		g/ha	35	103365
Endosulfan	NR NR, perroquets	BEH	FDB	FDNG	NOAEL			hv	0.07		%	100	87469
Endosulfan	Columba livia, rock dove	CEL	CEL	RSBC	NOAEL	LOAEL	0.17	d	1	5	mg/kg	100	103367
Endosulfan I	Gallus domesticus, Domestic Chicken	CEL	GEN	DNAC	LOAEL		1	d	2		ug/egg	100	80315
Endosulfan I	Gallus domesticus, Domestic Chicken	CEL	CEL	LMPH	LOAEL		1	d	2		ug/egg	100	80315
Endosulfan	Gallus domesticus, Domestic Chicken	CEL	HIS	GHIS	LOAEL		58	d	2		ppm	100	93216
Endosulfan	Gallus domesticus, Domestic Chicken	CEL	CEL	LMPH	LOAEL		60	d	2		ppm	100	103496
Endosulfan	Gallus domesticus, Domestic Chicken	CEL	CEL	LEUK	LOAEL		42	d	2		ppm	100	89475
Endosulfan	Gallus domesticus, Domestic Chicken	CEL	CEL	RBCE	LOAEL		42	d	2		ppm	100	89390
Endosulfan I	Gallus domesticus, Domestic Chicken	GRO	GRO	WGHT	NOAEL		1	d	2		ug/egg	100	80315
Endosulfan	Gallus domesticus, Domestic Chicken	GRO	GRO	WGHT	NOAEL		60	d	2		ppm	100	93216
Endosulfan	Gallus domesticus, Domestic Chicken	GRO	MPH	SMIX	LOAEL		77	d	48		ppm	100	93553
Endosulfan	Gallus domesticus, Domestic Chicken	GRO	MPH	SMIX	NOAEL		77	d	32		ppm	100	93553
Endosulfan	Gallus domesticus, Domestic Chicken	GRO	GRO	WGHT	NOAEL		60	d	2		ppm	100	103496
Endosulfan	Gallus domesticus, Domestic Chicken	GRO	MPH	SMIX	LOAEL		56	d	2		ppm	100	103496

Table H-7 Bird Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Gallus domesticus, Domestic Chicken	GRO	GRO	WGHT	LOAEL		7	d	2		ppm	100	103758
Endosulfan	Anas platyrhynchos, Mallard duck	MOR	MOR	MORT	LC50		8	d	1053		ppm	100	35214
Endosulfan	Anas platyrhynchos, Mallard duck	MOR	MOR	MORT	LC50		8	d	1010.88		mg/kg bdwt	96	35243
Endosulfan	Anas platyrhynchos, Mallard duck	MOR	MOR	MORT	LD50		14	d	33		mg/kg bdwt	96	50386
Endosulfan	Anas platyrhynchos, Mallard duck	MOR	MOR	MORT	LD50		14	d	45		mg/kg bdwt	96	50386
Endosulfan	Anas platyrhynchos, Mallard duck	MOR	MOR	MORT	LD50		14	d	31.2		mg/kg bdwt	96	50386
Endosulfan	Colinus virginianus, northern bobwhite	MOR	MOR	MORT	LC50		8	d	805		ppm	100	35214
Endosulfan	Colinus virginianus, northern bobwhite	MOR	MOR	MORT	LC50		8	d	772.8		mg/kg bdwt	96	35243
Endosulfan	Coturnix japonica, Japanese quail	MOR	MOR	MORT	LC50		8	d	~ 1250		ppm	100	35214
Endosulfan	Coturnix japonica, Japanese quail	MOR	MOR	MORT	LC50		8	d	~ 1200		mg/kg bdwt	96	35243
Endosulfan	Coturnix japonica, Japanese quail	MOR	MOR	MORT	LC50		5	d	2906		ppm	96	50181
Endosulfan	Coturnix japonica, Japanese quail	MOR	MOR	MORT	LC50		5	d	2160		ppm	22.8	50181
Endosulfan	Phasianus colchicus, ring-necked pheasant	MOR	MOR	MORT	LC50		8	d	1275		ppm	100	35214
Endosulfan	Phasianus colchicus, ring-necked pheasant	MOR	MOR	MORT	LC50		8	d	1224		mg/kg bdwt	96	35243
Endosulfan	Phasianus colchicus, ring-necked pheasant	MOR	MOR	MORT	LD50		14	d	80		mg/kg bdwt	96	50386
Endosulfan	Phasianus colchicus, ring-necked pheasant	MOR	MOR	MORT	LD50		14	d	190		mg/kg bdwt	96	50386
Endosulfan	Phasianus colchicus, ring-necked pheasant	MOR	MOR	MORT	LD50		14	d	> 320		mg/kg bdwt	96	50386

Table H-7 Bird Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Columba livia, rock dove	PHY	PHY	ECTG	NOAEL	LOAEL	0.07	d	3	5	mg/kg	100	103367
Endosulfan	Columba livia, rock dove	PHY	ITX	GITX	NOAEL	LOAEL	0.17	d	1	5	mg/kg	100	103367
Endosulfan I	Gallus domesticus, Domestic Chicken	PHY	IMM	IGMG	LOAEL		1	d	2		ug/egg	100	80315
Endosulfan	Gallus domesticus, Domestic Chicken	PHY	IMM	MCPG	LOAEL		28	d	30		ppm	100	77067

Table H-8. Mammal data from ECOTOX. Data are arranged in alphabetical order by Effect Group. The code list for ECOTOX can be found at: <http://cfpub.epa.gov/ecotox/blackbox/help/codelist.pdf>.

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Rattus norvegicus, Norway rat	ACC	ACC	RSDE	LOAEL		30	d	11		mg/kg bdwt	99	104482
Endosulfan	Mus musculus, House mouse	BCM	ENZ	GSTR	LOAEL		4	d	5		mg/kg bdwt	100	92613
Endosulfan	Mus musculus, House mouse	BCM	ENZ	ASAT	LOAEL		105	d	35		ug/org/d	35	87623
Endosulfan	Mus musculus, House mouse	BCM	ENZ	ASAT	LOAEL		105	d	35		ug/org/d	35	87623
Endosulfan	Mus musculus, House mouse	BCM	ENZ	PNAD	LOAEL		3	d	5		ppm	100	92612
Endosulfan	Rattus norvegicus, Norway rat	BCM	ENZ	SODA	LOAEL		42	d	2.375		mg/kg bdwt	95	78014
Endosulfan	Rattus norvegicus, Norway rat	BCM	ENZ	GLPX	LOAEL		42	d	2.375		mg/kg bdwt	95	78014
Endosulfan	Rattus norvegicus, Norway rat	BCM	ENZ	CTLS	LOAEL		42	d	2.375		mg/kg bdwt	95	78014
Endosulfan	Rattus norvegicus, Norway rat	BCM	BCM	MLDH	LOAEL		42	d	2.375		mg/kg bdwt	95	78014

Table H-8 Mammal Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Rattus norvegicus, Norway rat	BCM	BCM	MCPR	LOAEL		15	d	7.5		ppm	100	103241
Endosulfan	Rattus norvegicus, Norway rat	BCM	BCM	MCPR	LOAEL		15	d	7.5		ppm	100	103241
Endosulfan	Rattus norvegicus, Norway rat	BCM	BCM	PHSC	LOAEL		15	d	7.5		ppm	100	103241
Endosulfan	Rattus norvegicus, Norway rat	BCM	ENZ	P450	LOAEL		15	d	7.5		ppm	100	103241
Endosulfan	Rattus norvegicus, Norway rat	BCM	ENZ	P450	LOAEL		15	d	7.5		ppm	100	103241
Endosulfan	Rattus norvegicus, Norway rat	BCM	ENZ	P450	LOAEL		15	d	7.5		ppm	100	103241
Endosulfan	Rattus norvegicus, Norway rat	BCM	HRM	NORE	LOAEL		0.04	d	40		mg/kg	95	103473
Endosulfan	Rattus norvegicus, Norway rat	BCM	BCM	5HAA	LOAEL		0.04	d	40		mg/kg	95	103473
Endosulfan	Rattus norvegicus, Norway rat	BCM	ENZ	AATT	LOAEL		15	d	10		mg/kg bdwt	100	103464
Endosulfan	Rattus norvegicus, Norway rat	BCM	BCM	BLLB	LOAEL		15	d	10		mg/kg bdwt	100	103464
Endosulfan	Mus musculus, House mouse	BCM	BCM	GLYC	LOAEL		31	d	4		ppm	98	103385
Endosulfan	Rattus norvegicus, Norway rat	BCM	HRM	DOPA	LOAEL		10	d	6		mg/kg bdwt	96	103411
Endosulfan	Rattus norvegicus, Norway rat	BCM	BCM	GLYC	LOAEL		15	d	5		mg/kg bdwt	100	103382
Endosulfan	Rattus norvegicus, Norway rat	BCM	ENZ	AHDX	LOAEL		22	d	3		mg/kg bdwt	100	89268
Endosulfan	Rattus norvegicus, Norway rat	BCM	BCM	GLTH	LOAEL		22	d	3		mg/kg bdwt	100	89268
Endosulfan	Oryctolagus cuniculus, European rabbit	BCM	BCM	PCLV	LOAEL		7	d	0.6055		mg/kg bdwt	35	91391
Endosulfan	Oryctolagus cuniculus, European rabbit	BCM	ENZ	ASAT	LOAEL		0.02	d	0.6055		mg/kg bdwt	35	91391

Table H-8 Mammal Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Rattus norvegicus, Norway rat	BCM	ENZ	LADH	LOAEL		11	d	7.35		ppm	98	103386
Endosulfan	Rattus norvegicus, Norway rat	BCM	BCM	DCDA	LOAEL		38	d	0.60695		mg/kg bdwt	99.5	103211
Endosulfan	Rattus norvegicus, Norway rat	BCM	HRM	SRTN	LOAEL		53	d	0.60695		mg/kg bdwt	99.5	103211
Endosulfan	Rattus norvegicus, Norway rat	BCM	BCM	GLUC	LOAEL		21	d	2		mg/kg bdwt	95	103364
Endosulfan	Rattus norvegicus, Norway rat	BCM	HRM	LUTH	LOAEL		15	d	7.5		mg/kg bdwt	100	71116
Endosulfan	Rattus norvegicus, Norway rat	BCM	ENZ	NHCR	LOAEL		15	d	7.5		mg/kg bdwt	100	71116
Endosulfan	Rattus norvegicus, Norway rat	BCM	HRM	TSTR	LOAEL		30	d	10		mg/kg bdwt	100	71116
Endosulfan	Rattus norvegicus, Norway rat	BCM	BCM	GLUC	LOAEL		5	d	12.5		ppm	100	103362
Endosulfan	Rattus norvegicus, Norway rat	BCM	BCM	GLUC	LOAEL		5	d	12.5		ppm	100	103362
Endosulfan	Rattus norvegicus, Norway rat	BCM	BCM	GLUC	LOAEL		5	d	12.5		ppm	100	103362
Endosulfan	Rattus norvegicus, Norway rat	BCM	ENZ	ALDO	LOAEL		5	d	12.5		ppm	100	103362
Endosulfan	Rattus norvegicus, Norway rat	BCM	ENZ	ALDO	LOAEL		5	d	12.5		ppm	100	103362
Endosulfan	Rattus norvegicus, Norway rat	BCM	ENZ	ALDO	LOAEL		5	d	12.5		ppm	100	103362
Endosulfan	Rattus norvegicus, Norway rat	BCM	ENZ	ALDO	LOAEL		5	d	12.5		ppm	100	103362
Endosulfan	Rattus norvegicus, Norway rat	BCM	ENZ	LADH	LOAEL		~110	d	1		ppm	95.32	103370
Endosulfan	Rattus norvegicus, Norway rat	BCM	HRM	TSTR	LOAEL		15	d	4.5		mg/kg bdwt	100	101456
Endosulfan	Rattus norvegicus, Norway rat	BCM	HRM	ESDL	LOAEL		15	d	4.5		mg/kg bdwt	100	101456

Table H-8 Mammal Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Rattus norvegicus, Norway rat	BCM	BCM	GLUC	LOAEL		0.04	d	40		ppm	100	104487
Endosulfan	Rattus norvegicus, Norway rat	BCM	ENZ	GPTR	LOAEL		30	d	18.75		mg/kg/d	100	104481
Endosulfan	Rattus norvegicus, Norway rat	BCM	ENZ	GPTR	LOAEL		30	d	9.83		mg/kg/d	100	104481
Endosulfan	Rattus norvegicus, Norway rat	BCM	BCM	PRCO	LOAEL		30	d	9.83		mg/kg/d	100	104481
Endosulfan	Rattus norvegicus, Norway rat	BCM	BCM	HMGL	LOAEL		30	d	18.75		mg/kg/d	100	104481
Endosulfan	Rattus norvegicus, Norway rat	BCM	ENZ	ATPA	LOAEL		30	d	11		mg/kg bdwt	99	104482
Endosulfan	Rattus norvegicus, Norway rat	BCM	BCM	PRCO	LOAEL		30	d	0.35		mg/kg bdwt	35	104643
Endosulfan	Rattus norvegicus, Norway rat	BCM	ENZ	ALPH	LOAEL		30	d	0.35		mg/kg bdwt	35	104643
Endosulfan	Rattus norvegicus, Norway rat	BCM	BCM	PHSI	LOAEL		0.17	d	14.25		mg/kg bdwt	95	104646
Endosulfan	Rattus norvegicus, Norway rat	BCM	BCM	PHSI	LOAEL		18	d	14.25		mg/kg bdwt	95	104646
Endosulfan	Rattus norvegicus, Norway rat	BCM	ENZ	SODA	LOAEL		30	d	0.499		mg/250g bdwt	99.8	101889
Endosulfan	Rattus norvegicus, Norway rat	BCM	BCM	GLTH	LOAEL		30	d	0.499		mg/250g bdwt	99.8	101889
Endosulfan	Rattus norvegicus, Norway rat	BCM	HRM	SRTN	LOEL		33	d	1		mg/kg	100	103593
Endosulfan	Rattus norvegicus, Norway rat	BCM	ENZ	GGTP	LOEL		70	d	2.5		mg/kg bdwt	95.32	103592
Endosulfan	Rattus norvegicus, Norway rat	BCM	ENZ	G6PD	LOEL		70	d	2.5		mg/kg bdwt	95.32	103592
Endosulfan	Rattus norvegicus, Norway rat	BCM	ENZ	LCDH	LOEL		70	d	2.5		mg/kg bdwt	95.32	103592
Endosulfan	Rattus norvegicus, Norway rat	BCM	HRM	SRTN	LOEL		10	d	0.95		mg/kg	95	103471

Table H-8 Mammal Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Rattus norvegicus, Norway rat	BCM	HRM	SRTN	LOEL		30	d	0.95		mg/kg	95	103471
Endosulfan	Rattus norvegicus, Norway rat	BCM	HRM	SRTN	LOEL		60	d	0.95		mg/kg	95	103471
Endosulfan	Mus musculus, House mouse	BCM	BCM	TOPR	NOAEL		105	d	35		ug/org/d	35	87623
Endosulfan	Mus musculus, House mouse	BCM	BCM	TOPR	NOAEL		105	d	35		ug/org/d	35	87623
Endosulfan	Rattus norvegicus, Norway rat	BCM	BCM	HMGL	NOAEL		105	d	6.12		mg/kg bdwt	98	75053
Endosulfan	Rattus norvegicus, Norway rat	BCM	BCM	MCPR	NOAEL		1	d	7.5		ppm	100	103241
Endosulfan	Rattus norvegicus, Norway rat	BCM	BCM	MCPR	NOAEL		1	d	7.5		ppm	100	103241
Endosulfan	Rattus norvegicus, Norway rat	BCM	BCM	MCPR	NOAEL		1	d	7.5		ppm	100	103241
Endosulfan	Rattus norvegicus, Norway rat	BCM	ENZ	P450	NOAEL		1	d	7.5		ppm	100	103241
Endosulfan	Rattus norvegicus, Norway rat	BCM	ENZ	P450	NOAEL		1	d	7.5		ppm	100	103241
Endosulfan	Rattus norvegicus, Norway rat	BCM	ENZ	P450	NOAEL		1	d	7.5		ppm	100	103241
Endosulfan	Capra hircus, Wild Goat	BCM	BCM	GLUC	NOAEL		25	d	30		mg/org/d	100	103594
Endosulfan	Rattus norvegicus, Norway rat	BCM	ENZ	ACHE	NOAEL	LOAEL	0.17	d	10	30	mg/kg	100	103467
Endosulfan	Rattus norvegicus, Norway rat	BCM	ENZ	ACHE	NOAEL		25	d	6		mg/kg bdwt	96	103411
Endosulfan	Rattus norvegicus, Norway rat	BCM	BCM	GBCM	NOAEL		728	d	75		ppm	96.7 to 97.9	103384
Endosulfan	Mus musculus, House mouse	BCM	BCM	GBCM	NOAEL		728	d	18		ppm	96.7 to 97.9	103384
Endosulfan I	Rattus norvegicus, Norway rat	BCM	ENZ	AATT	NOAEL	LOAEL	140	d	100	300	ppm	>98.7	103465

Table H-8 Mammal Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan I	Rattus norvegicus, Norway rat	BCM	ENZ	AATT	NOAEL		140	d	300		ppm	>98.7	103465
Endosulfan	Rattus norvegicus, Norway rat	BCM	HRM	TSTR	NOAEL	LOAEL	30	d	10	15	mg/kg bdwt	100	103382
Endosulfan II	Rattus norvegicus, Norway rat	BCM	ENZ	AATT	NOAEL		140	d	300		ppm	>98.7	103465
Endosulfan II	Rattus norvegicus, Norway rat	BCM	ENZ	AATT	NOAEL		140	d	300		ppm	>98.7	103465
Endosulfan	Rattus norvegicus, Norway rat	BCM	ENZ	AATT	NOAEL		140	d	300		ppm	>98.8	103465
Endosulfan	Rattus norvegicus, Norway rat	BCM	ENZ	AATT	NOAEL		140	d	300		ppm	>98.8	103465
Endosulfan	Rattus norvegicus, Norway rat	BCM	BCM	ALBM	NOAEL		42	d	49		ppm	98	86301
Endosulfan	Rattus norvegicus, Norway rat	BCM	BCM	AGLB	NOAEL		42	d	49		ppm	98	86301
Endosulfan	Rattus norvegicus, Norway rat	BCM	BCM	BGLB	NOAEL		42	d	49		ppm	98	86301
Endosulfan	Rattus norvegicus, Norway rat	BCM	BCM	GGLB	NOAEL	LOAEL	42	d	29.4	49	ppm	98	86301
Endosulfan	Rattus norvegicus, Norway rat	BCM	BCM	ALGL	NOAEL	LOAEL	154	d	5	10	ppm	100	86297
Endosulfan	Rattus norvegicus, Norway rat	BCM	ENZ	AATT	NOAEL		16	d	25		AI mg/kg bdwt	35	103381
Endosulfan	Rattus norvegicus, Norway rat	BCM	BCM	PRCO	NOAEL		16	d	25		AI mg/kg bdwt	35	103381
Endosulfan	Rattus norvegicus, Norway rat	BCM	HRM	TSTR	NOAEL	LOAEL	11	d	7.35	9.8	ppm	98	103386
Endosulfan	Rattus norvegicus, Norway rat	BCM	BCM	PRCO	NOAEL		30	d	10		mg/kg bdwt	100	71116
Endosulfan	Rattus norvegicus, Norway rat	BCM	BCM	PRCO	NOAEL		30	d	10		mg/kg bdwt	100	71116
Endosulfan	Rattus norvegicus, Norway rat	BCM	ENZ	NCCR	NOAEL		30	d	10		mg/kg bdwt	100	71116

Table H-8 Mammal Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Rattus norvegicus, Norway rat	BCM	BCM	GLUC	NOAEL		5	d	12.5		ppm	100	103362
Endosulfan	Rattus norvegicus, Norway rat	BCM	ENZ	HXKN	NOAEL		0.04	d	40		ppm	100	104487
Endosulfan	Rattus norvegicus, Norway rat	BCM	BCM	CACO	NOAEL	LOAEL	49	d	0.625	5	ppm	100	104487
Endosulfan	Rattus norvegicus, Norway rat	BCM	HRM	TSTR	NOAEL		140	dpn	2.91		mg/kg bdwt	97	104644
Endosulfan	Rattus norvegicus, Norway rat	BCM	HRM	TSTR	NOAEL		140	dpn	1.455		mg/kg bdwt	97	104645
Endosulfan	Rattus norvegicus, Norway rat	BCM	ENZ	GENZ	NOEC	LOEC	14	d	50	200	ppm	100	104491
Endosulfan	Rattus norvegicus, Norway rat	BCM	HRM	SRTN	NOEL		21	d	1		mg/kg	100	103593
Endosulfan	Rattus norvegicus, Norway rat	BCM	HRM	SRTN	NOEL	LOEL	35	d	0.5	1	mg/kg	100	103593
Endosulfan	Mus musculus, House mouse	BEH	BEH	GBHV	LOAEL		0.00	d	0.343		mg/kg	35	93211
Endosulfan	Rattus norvegicus, Norway rat	BEH	BEH	ATTK	LOAEL		10	d	3		mg/kg	100	103472
Endosulfan	Rattus norvegicus, Norway rat	BEH	BEH	ATTK	LOAEL		10	d	3		mg/kg	100	103472
Endosulfan	Rattus norvegicus, Norway rat	BEH	BEH	ATTK	LOAEL		10	d	3		mg/kg	100	103472
Endosulfan	Rattus norvegicus, Norway rat	BEH	BEH	INST	LOAEL		90	d	2		mg/kg bdwt	95	103406
Endosulfan	Rattus norvegicus, Norway rat	BEH	BEH	ACTP	LOAEL		25	dpn	6		mg/kg bdwt	96	103411
Endosulfan	Mus musculus, House mouse	BEH	BEH	NRES	LOAEL		0.02	d	0.5		mg/kg	100	76663
Endosulfan	Rattus norvegicus, Norway rat	BEH	BEH	RSPT	LOAEL		90	d	2		mg/kg bdwt	95	96040
Endosulfan	Rattus norvegicus, Norway rat	BEH	BEH	RSPT	LOAEL		90	d	2		mg/kg bdwt	95	96040

Table H-8 Mammal Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Oryctolagus cuniculus, European rabbit	BEH	FDB	FCNS	LOAEL		28	d	0.6055		mg/kg bdwt	35	91391
Endosulfan	Rattus norvegicus, Norway rat	BEH	BEH	RSPT	LOAEL		16	d	25		Al mg/kg bdwt	35	103381
Endosulfan	Rattus norvegicus, Norway rat	BEH	BEH	INST	LOAEL		16	d	1		mg/kg bdwt	100	104485
Endosulfan	Rattus norvegicus, Norway rat	BEH	BEH	ATTK	LOEL		33	d	1		mg/kg	100	103593
Endosulfan	Rattus norvegicus, Norway rat	BEH	BEH	INST	NOAEL		90	d	2		mg/kg bdwt	95	103406
Endosulfan	Rattus norvegicus, Norway rat	BEH	FDB	FCNS	NOAEL		728	d	75		ppm	96.7 to 97.9	103384
Endosulfan	Mus musculus, House mouse	BEH	FDB	FCNS	NOAEL		728	d	18		ppm	96.7 to 97.9	103384
Endosulfan	Rattus norvegicus, Norway rat	BEH	FDB	FCNS	NOAEL		154	d	20		ppm	100	86297
Endosulfan	Rattus norvegicus, Norway rat	BEH	FDB	FCNS	NOAEL		30	d	5.988		mg/250g bdwt	99.8	101889
Endosulfan	Rattus norvegicus, Norway rat	BEH	BEH	ATTK	NOEL	LOEL	35	d	0.5	1	mg/kg	100	103593
Endosulfan	Rattus norvegicus, Norway rat	CEL	CEL	TWBC	LOAEL		105	d	0.612		mg/kg bdwt	98	75053
Endosulfan	Mesocricetus auratus, Golden hamster	CEL	GEN	CABR	LOAEL		1	d	2.8		mg/kg bdwt	35	90770
Endosulfan	Mesocricetus auratus, Golden hamster	CEL	GEN	CABR	LOAEL		42	d	5.6		mg/kg bdwt	35	103413
Endosulfan I	Rattus norvegicus, Norway rat	CEL	CEL	FOCI	LOAEL		140	d	30		ppm	>98.7	103465
Endosulfan II	Rattus norvegicus, Norway rat	CEL	CEL	FOCI	LOAEL		140	d	30		ppm	>98.7	103465
Endosulfan	Rattus norvegicus, Norway rat	CEL	CEL	FOCI	LOAEL		140	d	30		ppm	>98.8	103465
Endosulfan	Mus musculus, House mouse	CEL	GEN	CABR	LOAEL		8	d	3		mg/kg bdwt	35	92346

Table H-8 Mammal Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan I	Mus musculus, House mouse	CEL	CEL	GABR	LOAEL		0.01	d	7.76		mg/kg	97	103363
Endosulfan	Mus musculus, House mouse	CEL	GEN	ME1M	LOAEL		13	d	1.05		mg/kg bdwt	35	104248
Endosulfan	Rattus norvegicus, Norway rat	CEL	GEN	DNAC	LOAEL		30	d	0.35		mg/kg bdwt	35	104643
Endosulfan	Rattus norvegicus, Norway rat	CEL	CEL	NCEL	LOEL		10	d	0.95		mg/kg	95	103471
Endosulfan	Rattus norvegicus, Norway rat	CEL	CEL	NCEL	LOEL		30	d	0.95		mg/kg	95	103471
Endosulfan	Rattus norvegicus, Norway rat	CEL	CEL	NCEL	LOEL		60	d	0.95		mg/kg	95	103471
Endosulfan	Mesocricetus auratus, Golden hamster	CEL	GEN	CABR	NOAEL		168	d	0.7		mg/kg bdwt	35	103413
Endosulfan	Mesocricetus auratus, Golden hamster	CEL	GEN	CABR	NOAEL		126	d	1.4		mg/kg bdwt	35	103413
Endosulfan	Mesocricetus auratus, Golden hamster	CEL	GEN	CABR	NOAEL		84	d	2.8		mg/kg bdwt	35	103413
Endosulfan	Rattus norvegicus, Norway rat	CEL	HIS	DLAT	NOAEL	LOAEL	728	d	15	75	ppm	96.7 to 97.9	103384
Endosulfan	Mus musculus, House mouse	CEL	HIS	GHIS	NOAEL		728	d	18		ppm	96.7 to 97.9	103384
Endosulfan	Rattus norvegicus, Norway rat	CEL	CEL	LEUK	NOAEL	LOAEL	42	d	9.8	29.4	ppm	98	86301
Endosulfan	Mus musculus, House mouse	CEL	CEL	PCCM	NOAEL		1.25	d	43.3		ppm	100	103551
Endosulfan	Oryctolagus cuniculus, European rabbit	CEL	CEL	RBCE	NOAEL		28	d	0.6055		mg/kg bdwt	35	91391
Endosulfan	Mus musculus, House mouse	CEL	HIS	HYPT	NOAEL	LOAEL	15	d	1.5	3	ppm	98	103263
Endosulfan	Rattus norvegicus, Norway rat	CEL	CEL	TWBC	NOAEL		30	d	32		mg/kg/d	100	104481
Endosulfan	Rattus norvegicus, Norway rat	CEL	CEL	TWBC	NOAEL	LOAEL	30	d	18.75	37.5	mg/kg/d	100	104481

Table H-8 Mammal Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Mus musculus, House mouse	GRO	GRO	WGHT	LOAEL		105	d	35		ug/org/d	35	87623
Endosulfan	Mus musculus, House mouse	GRO	MPH	WGHT	LOAEL		105	d	35		ug/org/d	35	87623
Endosulfan	Mus musculus, House mouse	GRO	MPH	WGHT	LOAEL		105	d	35		ug/org/d	35	87623
Endosulfan	Mus musculus, House mouse	GRO	GRO	WGHT	LOAEL		105	d	35		ug/org/d	35	87623
Endosulfan	Mus musculus, House mouse	GRO	GRO	GAIN	LOAEL		7	d	7.5		ppm	100	93443
Endosulfan	Rattus norvegicus, Norway rat	GRO	MPH	WGHT	LOAEL		14	d	1		mg/kg bdwt	>99.98	103240
Endosulfan	Rattus norvegicus, Norway rat	GRO	GRO	GAIN	LOAEL		14	d	1		mg/kg bdwt	>99.98	103238
Endosulfan	Rattus norvegicus, Norway rat	GRO	GRO	WGHT	LOAEL		14	d	1		mg/kg bdwt	>99.98	103238
Endosulfan	Rattus norvegicus, Norway rat	GRO	MPH	LGTH	LOAEL		14	d	1		mg/kg bdwt	>99.98	103238
Endosulfan	Rattus norvegicus, Norway rat	GRO	DVP	DFRM	LOAEL		14	d	1		mg/kg bdwt	>99.98	103238
Endosulfan	Rattus norvegicus, Norway rat	GRO	GRO	GAIN	LOAEL		21	d	2		mg/kg bdwt	95	103406
Endosulfan	Rattus norvegicus, Norway rat	GRO	GRO	GAIN	LOAEL		7	d	2		mg/kg bdwt	95	103406
Endosulfan	Rattus norvegicus, Norway rat	GRO	GRO	GAIN	LOAEL		7	d	2		mg/kg bdwt	95	103406
Endosulfan	Rattus norvegicus, Norway rat	GRO	GRO	GAIN	LOAEL		7	d	2		mg/kg bdwt	95	103406
Endosulfan	Rattus norvegicus, Norway rat	GRO	MPH	SMIX	LOAEL		7	d	2		mg/kg bdwt	95	103406
Endosulfan	Rattus norvegicus, Norway rat	GRO	MPH	SMIX	LOAEL		7	d	2		mg/kg bdwt	95	103406
Endosulfan	Rattus norvegicus, Norway rat	GRO	MPH	SMIX	LOAEL		7	d	2		mg/kg bdwt	95	103406

Table H-8 Mammal Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan I	Rattus norvegicus, Norway rat	GRO	MPH	SMIX	LOAEL		140	d	300		ppm	>98.7	103465
Endosulfan II	Rattus norvegicus, Norway rat	GRO	GRO	GAIN	LOAEL		140	d	30		ppm	>98.7	103465
Endosulfan II	Rattus norvegicus, Norway rat	GRO	GRO	GAIN	LOAEL		140	d	300		ppm	>98.7	103465
Endosulfan II	Rattus norvegicus, Norway rat	GRO	MPH	SMIX	LOAEL		140	d	300		ppm	>98.7	103465
Endosulfan	Rattus norvegicus, Norway rat	GRO	GRO	GAIN	LOAEL		140	d	30		ppm	>98.8	103465
Endosulfan	Rattus norvegicus, Norway rat	GRO	MPH	SMIX	LOAEL		140	d	300		ppm	>98.8	103465
Endosulfan	Mus musculus, House mouse	GRO	MPH	ABNM	LOAEL		35	d	3		mg/kg bdwt	35	92037
Endosulfan	Oryctolagus cuniculus, European rabbit	GRO	GRO	WGHT	LOAEL		28	d	0.6055		mg/kg bdwt	35	91391
Endosulfan	Rattus norvegicus, Norway rat	GRO	MPH	WGHT	LOAEL		11	d	7.35		ppm	98	103386
Endosulfan	Oryctolagus cuniculus, European rabbit	GRO	MPH	ABNM	LOAEL		98	d	1		mg/kg bdwt	100	103379
Endosulfan	Rattus norvegicus, Norway rat	GRO	DVP	WGHT	LOAEL		44	d	0.60695		mg/kg bdwt	99.5	103211
Endosulfan	Rattus norvegicus, Norway rat	GRO	MPH	SMIX	LOAEL		~110	d	1		ppm	95.32	103370
Endosulfan	Rattus norvegicus, Norway rat	GRO	MPH	WGHT	LOAEL		15	d	4.5		mg/kg bdwt	100	101456
Endosulfan	Rattus norvegicus, Norway rat	GRO	MPH	WGHT	LOAEL		15	d	4.5		mg/kg bdwt	100	101456
Endosulfan	Rattus norvegicus, Norway rat	GRO	GRO	WGHT	LOAEL		30	d	0.35		mg/kg bdwt	35	104643
Endosulfan	Rattus norvegicus, Norway rat	GRO	MPH	SMIX	LOAEL		30	d	0.35		mg/kg bdwt	35	104643
Endosulfan	Rattus norvegicus, Norway rat	GRO	MPH	SMIX	LOAEL		65	dpn	1.455		mg/kg bdwt	97	104644

Table H-8 Mammal Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Rattus norvegicus, Norway rat	GRO	MPH	WGHT	LOEL		30	d	10		mg/kg bdwt	100	35198
Endosulfan	Rattus norvegicus, Norway rat	GRO	MPH	WGHT	LOEL		30	d	10		mg/kg bdwt	100	35198
Endosulfan	Rattus norvegicus, Norway rat	GRO	DVP	TERA	LOEL		16	d	5		mg/kg bdwt	100	35199
Endosulfan	Mus musculus, House mouse	GRO	MPH	SMIX	NOAEL		3	d	5		ppm	100	92612
Endosulfan	Rattus norvegicus, Norway rat	GRO	MPH	WGHT	NOAEL		15	d	7.5		ppm	100	103241
Endosulfan	Rattus norvegicus, Norway rat	GRO	MPH	WGHT	NOAEL		1	d	7.5		ppm	100	103241
Endosulfan	Rattus norvegicus, Norway rat	GRO	MPH	WGHT	NOAEL		15	d	7.5		ppm	100	103241
Endosulfan	Rattus norvegicus, Norway rat	GRO	MPH	WGHT	NOAEL		1	d	7.5		ppm	100	103241
Endosulfan	Rattus norvegicus, Norway rat	GRO	MPH	WGHT	NOAEL		15	d	7.5		ppm	100	103241
Endosulfan	Rattus norvegicus, Norway rat	GRO	MPH	WGHT	NOAEL		1	d	7.5		ppm	100	103241
Endosulfan	Mus musculus, House mouse	GRO	GRO	WGHT	NOAEL	LOAEL	7	d	7.5	15	ppm	100	93443
Endosulfan	Mus musculus, House mouse	GRO	MPH	SMIX	NOAEL	LOAEL	7	d	5.4	15	ppm	100	93443
Endosulfan	Mus musculus, House mouse	GRO	MPH	SMIX	NOAEL		7	d	15		ppm	100	93443
Endosulfan	Rattus norvegicus, Norway rat	GRO	GRO	GAIN	NOAEL		7	d	2		mg/kg bdwt	95	103406
Endosulfan	Rattus norvegicus, Norway rat	GRO	GRO	GAIN	NOAEL		7	d	2		mg/kg bdwt	95	103406
Endosulfan	Mus musculus, House mouse	GRO	DVP	ABNM	NOAEL	LOAEL	5	d	12.3228 1	16.1069 8	mg/kg bdwt/d	97.03	103408
Endosulfan	Mus musculus, House mouse	GRO	GRO	GAIN	NOAEL		31	d	4		ppm	98	103385

Table H-8 Mammal Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Mus musculus, House mouse	GRO	MPH	SMIX	NOAEL		31	d	4		ppm	98	103385
Endosulfan	Mus musculus, House mouse	GRO	MPH	WGHT	NOAEL	LOAEL	5	d	16.10698	20.95848	mg/kg bdwt/d	97.03	103408
Endosulfan	Rattus norvegicus, Norway rat	GRO	GRO	GAIN	NOAEL	LOAEL	126	d	15	75	ppm	96.7 to 97.9	103384
Endosulfan	Rattus norvegicus, Norway rat	GRO	GRO	GAIN	NOAEL	LOAEL	42	d	15	75	ppm	96.7 to 97.9	103384
Endosulfan	Rattus norvegicus, Norway rat	GRO	MPH	WGHT	NOAEL		728	d	75		ppm	96.7 to 97.9	103384
Endosulfan	Mus musculus, House mouse	GRO	GRO	GAIN	NOAEL	LOAEL	91	d	6	18	ppm	96.7 to 97.9	103384
Endosulfan	Mus musculus, House mouse	GRO	GRO	GAIN	NOAEL		728	d	18		ppm	96.7 to 97.9	103384
Endosulfan	Mus musculus, House mouse	GRO	MPH	WGHT	NOAEL		728	d	18		ppm	96.7 to 97.9	103384
Endosulfan I	Rattus norvegicus, Norway rat	GRO	GRO	GAIN	NOAEL		140	d	300		ppm	>98.7	103465
Endosulfan I	Rattus norvegicus, Norway rat	GRO	MPH	SMIX	NOAEL	LOAEL	140	d	30	100	ppm	>98.7	103465
Endosulfan I	Rattus norvegicus, Norway rat	GRO	GRO	GAIN	NOAEL		140	d	300		ppm	>98.7	103465
Endosulfan II	Rattus norvegicus, Norway rat	GRO	MPH	SMIX	NOAEL	LOAEL	140	d	30	100	ppm	>98.7	103465
Endosulfan	Rattus norvegicus, Norway rat	GRO	MPH	SMIX	NOAEL	LOAEL	140	d	30	100	ppm	>98.8	103465
Endosulfan	Rattus norvegicus, Norway rat	GRO	GRO	GAIN	NOAEL		140	d	300		ppm	>98.8	103465
Endosulfan	Rattus norvegicus, Norway rat	GRO	GRO	WGHT	NOAEL		42	d	49		ppm	98	86301
Endosulfan	Rattus norvegicus, Norway rat	GRO	MPH	SMIX	NOAEL	LOAEL	42	d	29.4	49	ppm	98	86301
Endosulfan	Rattus norvegicus, Norway rat	GRO	MPH	SMIX	NOAEL		42	d	49		ppm	98	86301

Table H-8 Mammal Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Rattus norvegicus, Norway rat	GRO	MPH	SMIX	NOAEL		42	d	49		ppm	98	86301
Endosulfan	Rattus norvegicus, Norway rat	GRO	MPH	SMIX	NOAEL	LOAEL	154	d	10	20	ppm	100	86297
Endosulfan	Rattus norvegicus, Norway rat	GRO	GRO	GRRT	NOAEL		154	d	20		ppm	100	86297
Endosulfan	Rattus norvegicus, Norway rat	GRO	GRO	WGHT	NOAEL		11	d	9.8		ppm	98	103386
Endosulfan	Rattus norvegicus, Norway rat	GRO	GRO	WGHT	NOAEL	LOAEL	~23	d	0.60695	6.0894	mg/kg bdwt	99.5	103211
Endosulfan	Mus musculus, House mouse	GRO	MPH	SMIX	NOAEL	LOAEL	15	d	1.5	3	ppm	98	103263
Endosulfan	Mus musculus, House mouse	GRO	GRO	WGHT	NOAEL		15	d	9		ppm	98	103263
Endosulfan	Rattus norvegicus, Norway rat	GRO	MPH	WGHT	NOAEL		30	d	10		mg/kg bdwt	100	71116
Endosulfan	Rattus norvegicus, Norway rat	GRO	MPH	WGHT	NOAEL		30	d	10		mg/kg bdwt	100	71116
Endosulfan	Rattus norvegicus, Norway rat	GRO	GRO	WGHT	NOAEL		~110	d	2		ppm	95.32	103370
Endosulfan	Rattus norvegicus, Norway rat	GRO	GRO	WGHT	NOAEL		16	d	5		mg/kg bdwt	100	104485
Endosulfan	Rattus norvegicus, Norway rat	GRO	MPH	SMIX	NOAEL	LOAEL	8	d	1	2.5	mg/kg bdwt	100	104485
Endosulfan	Rattus norvegicus, Norway rat	GRO	MPH	SMIX	NOAEL	LOAEL	30	d	18.75	37.5	mg/kg/d	100	104481
Endosulfan	Rattus norvegicus, Norway rat	GRO	MPH	SMIX	NOAEL	LOAEL	30	d	19.66	32	mg/kg/d	100	104481
Endosulfan	Rattus norvegicus, Norway rat	GRO	GRO	WGHT	NOAEL		30	d	32		mg/kg/d	100	104481
Endosulfan	Rattus norvegicus, Norway rat	GRO	GRO	WGHT	NOAEL		30	d	62.5		mg/kg/d	100	104481
Endosulfan	Rattus norvegicus, Norway rat	GRO	GRO	WGHT	NOAEL	LOAEL	2	d	1.455	2.91	mg/kg bdwt	97	104644

Table H-8 Mammal Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Rattus norvegicus, Norway rat	GRO	GRO	WGHT	NOAEL		140	dpn	1.455		mg/kg bdwt	97	104645
Endosulfan	Rattus norvegicus, Norway rat	GRO	MPH	SMIX	NOAEL		140	dpn	1.455		mg/kg bdwt	97	104645
Endosulfan	Rattus norvegicus, Norway rat	GRO	DVP	DVLP	NOAEL		140	dpn	1.455		mg/kg bdwt	97	104645
Endosulfan	Rattus norvegicus, Norway rat	GRO	GRO	WGHT	NOEL		70	d	10		mg/kg bdwt	95.32	103592
Endosulfan	Rattus norvegicus, Norway rat	GRO	MPH	WGHT	NOEL		70	d	10		mg/kg bdwt	95.32	103592
Endosulfan	Rattus norvegicus, Norway rat	GRO	MPH	ABNM	NOEL	LOEL	70	d	2.5	5	mg/kg bdwt	95.32	103592
Endosulfan	Rattus norvegicus, Norway rat	GRO	MPH	WGHT	NOEL		16	d	5		mg/kg bdwt	100	35198
Endosulfan	Rattus norvegicus, Norway rat	GRO	MPH	WGHT	NOEL		16	d	5		mg/kg bdwt	100	35198
Endosulfan	Mus musculus, House mouse	MOR	MOR	MORT	LD50		1	d	1.715		mg/kg	35	93211
Endosulfan	Rattus norvegicus, Norway rat	MOR	MOR	MORT	LD50		7	d	22.1		mg/kg	100	103467
Endosulfan	Rattus norvegicus, Norway rat	MOR	MOR	MORT	LD50		7	d	46.7		mg/kg	100	103467
Endosulfan	Rattus norvegicus, Norway rat	MOR	MOR	MORT	LD50		7	d	48.6		mg/kg	100	103467
Endosulfan	Rattus norvegicus, Norway rat	MOR	MOR	MORT	LD50		7	d	89.4		mg/kg	100	103467
Endosulfan	Mus musculus, House mouse	MOR	MOR	MORT	LD50		7	d	7.5		mg/kg	100	103467
Endosulfan	Mus musculus, House mouse	MOR	MOR	MORT	LD50		7	d	6.9		mg/kg	100	103467
Endosulfan	Mus musculus, House mouse	MOR	MOR	MORT	LD50		7	d	13.5		mg/kg	100	103467
Endosulfan	Mus musculus, House mouse	MOR	MOR	MORT	LD50		7	d	12.6		mg/kg	100	103467

Table H-8 Mammal Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Rattus norvegicus, Norway rat	MOR	MOR	SURV	NOAEL		14	d	1		mg/kg bdwt	>99.98	103238
Endosulfan	Rattus norvegicus, Norway rat	MOR	MOR	SURV	NOAEL		728	d	75		ppm	96.7 to 97.9	103384
Endosulfan	Mus musculus, House mouse	MOR	MOR	SURV	NOAEL		728	d	18		ppm	96.7 to 97.9	103384
Endosulfan	Mus musculus, House mouse	MOR	MOR	SURV	NOAEL	LOAEL	728	d	6	18	ppm	96.7 to 97.9	103384
Endosulfan	Rattus norvegicus, Norway rat	MOR	MOR	MORT	NOAEL		154	d	20		ppm	100	86297
Endosulfan	Rattus norvegicus, Norway rat	MOR	MOR	PSUR	NOAEL		777	d	178		ppm	98.8	95898
Endosulfan	Mus musculus, House mouse	MOR	MOR	PSUR	NOAEL		644	d	3		ppm	98.8	95898
Endosulfan	Mus musculus, House mouse	MOR	MOR	PSUR	NOAEL		644	d	6		ppm	98.8	95898
Endosulfan	Rattus norvegicus, Norway rat	MOR	MOR	SURV	NOAEL		15	d	9		mg/kg bdwt	100	101456
Endosulfan	Rattus norvegicus, Norway rat	MOR	MOR	SURV	NOAEL		15	d	9		mg/kg bdwt	100	101456
Endosulfan	Rattus norvegicus, Norway rat	MOR	MOR	MORT	NOAEL		21	dpn	2.91		mg/kg bdwt	97	104644
Endosulfan	Rattus norvegicus, Norway rat	MOR	MOR	MORT	NOAEL		21	dpn	2.91		mg/kg bdwt	97	104644
Endosulfan	Mus musculus, House mouse	MOR	MOR	MORT	NR-ZERO			d	6.3		mg/kg bdwt	100	87655
Endosulfan	Rattus norvegicus, Norway rat	MOR	MOR	MORT	NR-ZERO			d	6.12		mg/kg bdwt	98	75053
Endosulfan	Rattus norvegicus, Norway rat	MOR	MOR	MORT	NR-ZERO	7		d	2.375		mg/kg bdwt	95	78014
Endosulfan	Mus musculus, House mouse	MOR	MOR	MORT	NR-ZERO	105		d	15		ppm	100	93443
Endosulfan	Rattus norvegicus, Norway rat	MOR	MOR	MORT	NR-ZERO	42		d	5		mg/kg bdwt	95.32	103592

Table H-8 Mammal Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Rattus norvegicus, Norway rat	MOR	MOR	MORT	NR-ZERO		11	d	9.8		ppm	98	103386
Endosulfan	Mus musculus, House mouse	MOR	MOR	MORT	NR-ZERO			d	~ 9800		ug/kg	98	97026
Endosulfan	Mus musculus, House mouse	MOR	MOR	MORT	NR-ZERO			d	9		ppm	98	103263
Endosulfan	Rattus norvegicus, Norway rat	MOR	MOR	MORT	NR-ZERO	4		d	2		ppm	95.32	103370
Endosulfan	Rattus norvegicus, Norway rat	MOR	MOR	MORT	NR-ZERO	15		d	5		mg/kg bdwt	100	104485
Endosulfan	Rattus norvegicus, Norway rat	PHY	PHY	SZRE	ED50	~110	0.08	d	11		mg/kg bdwt	100	49538
Endosulfan	Rattus norvegicus, Norway rat	PHY	PHY	SZRE	ED50	16	0.08	d	6.9		mg/kg bdwt	100	49538
Endosulfan	Rattus norvegicus, Norway rat	PHY	PHY	SZRE	ED50		0.08	d	9.4		mg/kg bdwt	100	49538
Endosulfan	Rattus norvegicus, Norway rat	PHY	PHY	SZRE	ED50		0.08	d	4		mg/kg bdwt	100	49538
Endosulfan I	Mus musculus, House mouse	PHY	PHY	SZRE	LOAEL		0.01	d	7.76		mg/kg	97	103363
Endosulfan	Mus musculus, House mouse	PHY	IMM	MCPG	NOAEL		7	d	6.3		mg/kg bdwt	100	87655
Endosulfan	Rattus norvegicus, Norway rat	PHY	IMM	IGMG	NOAEL	LOAEL	105	d	0.612	6.12	mg/kg bdwt	98	75053
Endosulfan	Capra hircus, Wild Goat	PHY	PHY	NUUP	NOAEL		25	d	30		mg/org/d	100	103594
Endosulfan	Rattus norvegicus, Norway rat	PHY	IMM	ABDT	NOAEL	LOAEL	42	d	9.8	29.4	ppm	98	86301
Endosulfan	Rattus norvegicus, Norway rat	PHY	IMM	IGMM	NOAEL	LOAEL	42	d	29.4	49	ppm	98	86301
Endosulfan	Rattus norvegicus, Norway rat	PHY	IMM	IGMG	NOAEL	LOAEL	42	d	29.4	49	ppm	98	86301
Endosulfan	Rattus norvegicus, Norway rat	PHY	IMM	MCPG	NOAEL	LOAEL	42	d	9.8	29.4	ppm	98	86301

Table H-8 Mammal Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Rattus norvegicus, Norway rat	PHY	IMM	ABDT	NOAEL	LOAEL	56	d	10	20	ppm	100	86297
Endosulfan	Rattus norvegicus, Norway rat	PHY	PHY	GFRT	NOAEL		16	d	25		Al mg/kg bdwt	35	103381
Endosulfan	Rattus norvegicus, Norway rat	PHY	INJ	TUMR	NOAEL		777	d	178		ppm	98.8	95898
Endosulfan	Rattus norvegicus, Norway rat	PHY	INJ	MTMR	NOAEL		574	d	562		ppm	98.8	95898
Endosulfan	Mus musculus, House mouse	PHY	INJ	TUMR	NOAEL		644	d	3		ppm	98.8	95898
Endosulfan	Mus musculus, House mouse	PHY	INJ	TUMR	NOAEL		644	d	6		ppm	98.8	95898
Endosulfan	Mus musculus, House mouse	PHY	INJ	TUMR	NOAEL		540	d	2.15		ppm	100	71346
Endosulfan	Rattus norvegicus, Norway rat	PHY	INJ	GINJ	NOEL	LOEL	728	d	15	75	ppm	96.7 to 97.9	103384
Endosulfan	Mus musculus, House mouse	PHY	INJ	GINJ	NOEL	LOEL	728	d	6	18	ppm	96.7 to 97.9	103384
Endosulfan	Rattus norvegicus, Norway rat	REP	REP	PILS	LOAEL		14	d	1		mg/kg bdwt	>99.98	103240
Endosulfan	Rattus norvegicus, Norway rat	REP	REP	SPCL	LOAEL		15	d	5		mg/kg bdwt	100	103382
Endosulfan	Mus musculus, House mouse	REP	REP	SPCL	LOAEL		35	d	3		mg/kg bdwt	35	92037
Endosulfan	Rattus norvegicus, Norway rat	REP	REP	SPCL	LOAEL		11	d	7.35		ppm	98	103386
Endosulfan	Oryctolagus cuniculus, European rabbit	REP	REP	SPCL	LOAEL		98	d	1		mg/kg bdwt	100	103379
Endosulfan	Rattus norvegicus, Norway rat	REP	REP	SPCL	LOAEL		~110	d	1		ppm	95.32	103370
Endosulfan	Mus musculus, House mouse	REP	REP	PRFM	LOAEL		5 TO 8	d	1.12		mg/kg bdwt	35	88886
Endosulfan	Mus musculus, House mouse	REP	REP	PRFM	LOAEL		5 TO 8	d	1.12		mg/kg bdwt	35	88886

Table H-8 Mammal Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Rattus norvegicus, Norway rat	REP	REP	GMET	LOAEL		65	dpn	1.455		mg/kg bdwt	97	104644
Endosulfan	Rattus norvegicus, Norway rat	REP	REP	SPCL	LOEL		70	d	2.5		mg/kg bdwt	95.32	103592
Endosulfan	Rattus norvegicus, Norway rat	REP	REP	RSEM	LOEL		16	d	5		mg/kg bdwt	100	35199
Endosulfan	Rattus norvegicus, Norway rat	REP	REP	ABNM	LOEL		16	d	5		mg/kg bdwt	100	35199
Endosulfan	Rattus norvegicus, Norway rat	REP	REP	ABRT	NOAEL		14	d	1		mg/kg bdwt	>99.98	103238
Endosulfan	Mus musculus, House mouse	REP	REP	DSTR	NOAEL		31	d	4		ppm	98	103385
Endosulfan	Mus musculus, House mouse	REP	REP	SPCL	NOAEL	LOAEL	5	d	12.3228 1	16.1069 8	mg/kg bdwt/d	97.03	103408
Endosulfan	Rattus norvegicus, Norway rat	REP	REP	PROG	NOAEL	LOAEL	~23	d	0.60695	6.0894	mg/kg bdwt	99.5	103211
Endosulfan	Mus musculus, House mouse	REP	REP	MSTR	NOAEL	LOAEL	15	d	1.5	3	ppm	98	103263
Endosulfan	Rattus norvegicus, Norway rat	REP	REP	SPCL	NOAEL		140	dpn	1.455		mg/kg bdwt	97	104645
Endosulfan	Rattus norvegicus, Norway rat	REP	REP	SPCL	NOEL	LOEL	70	d	2.5	5	mg/kg bdwt	95.32	103592
Endosulfan	Rattus norvegicus, Norway rat	REP	REP	SPCL	NOEL	LOEL	70	d	2.5	5	mg/kg bdwt	95.32	103592

Table H-9 .Terrestrial-Phase Amphibian and Reptile Data from ECOTOX

Table H-9. Terrestrial-phase amphibian and reptile data from ECOTOX. Data are arranged in alphabetical order by Effect Group. The code list for ECOTOX can be found at: <http://cfpub.epa.gov/ecotox/blackbox/help/codelist.pdf>.

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Rana pipiens, Leopard frog	CEL	CEL	SPLO	NOAEL		21	d	0.0000002		ppm	100	70218
Endosulfan	Rana pipiens, Leopard frog	PHY	IMM	LYMP	NOAEL		21	d	0.0000002		ppm	100	70218
Endosulfan	Rana pipiens, Leopard frog	PHY	IMM	PHAG	NOAEL		21	d	0.0000002		ppm	100	70218
Endosulfan	Rana pipiens, Leopard frog	PHY	IMM	IFCT	NOAEL		21	d	0.0000002		ppm	100	70218
Endosulfan	Caiman latirostris, Broad-snouted caiman	REP	AEG	WGHT	NOAEL	LOAEL	40 TO 49	d	1.5	150	ug/egg	96.3	103221

Table H-10. Worm and nematode data from ECOTOX. Data are arranged in alphabetical order by Effect Group. The code list for ECOTOX can be found at: <http://cfpub.epa.gov/ecotox/blackbox/help/codelist.pdf>.

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt 2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Worms													
Endosulfan	Lumbricus terrestris, Earthworm	ACC	ACC	RSDE	BCF		15	d	0.81		mg/kg soil	100	86741
Endosulfan	Lumbricus terrestris, Earthworm	ACC	ACC	RSDE	BCF		7	d	0.89		mg/kg soil	100	86741
Endosulfan	Lumbricus terrestris, Earthworm	ACC	ACC	RSDE	BCF		2	d	12.29		mg/kg soil	100	86741
Endosulfan	Lumbricus terrestris, Earthworm	ACC	ACC	RSDE	BAF		2	d	1.13		mg/kg soil	100	87129
Endosulfan	Lumbricus terrestris, Earthworm	ACC	ACC	RSDE	BAF		2	d	5.32		mg/kg soil	100	87129
Endosulfan	Lumbricus terrestris, Earthworm	ACC	ACC	RSDE	BAF		2	d	12.29		mg/kg soil	100	87129

Table H-10 Worm and Nematode Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt 2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Lumbricus terrestris, Earthworm	ACC	ACC	RSDE	BAF		7	d	0.89		mg/kg soil	100	87129
Endosulfan	Lumbricus terrestris, Earthworm	ACC	ACC	RSDE	BAF		7	d	2.72		mg/kg soil	100	87129
Endosulfan	Lumbricus terrestris, Earthworm	ACC	ACC	RSDE	BAF		7	d	5.82		mg/kg soil	100	87129
Endosulfan	Lumbricus terrestris, Earthworm	ACC	ACC	RSDE	BAF		7	d	0.81		mg/kg soil	100	87129
Endosulfan	Lumbricus terrestris, Earthworm	ACC	ACC	RSDE	BAF		7	d	1.88		mg/kg soil	100	87129
Endosulfan	Lumbricus terrestris, Earthworm	ACC	ACC	RSDE	BAF		7	d	3.26		mg/kg soil	100	87129
Endosulfan	Lumbricus terrestris, Earthworm	BCM	BCM	PRSL	LOAEL		15	d	0.81		mg/kg soil	100	86741
Endosulfan	Lumbricus terrestris, Earthworm	BCM	BCM	PRSL	LOAEL		7	d	0.89		mg/kg soil	100	86741
Endosulfan	Lumbricus terrestris, Earthworm	BCM	BCM	PRSL	LOAEL		2	d	1.13		mg/kg soil	100	86741
Endosulfan	Lumbricus terrestris, Earthworm	BCM	BCM	PRCO	LOAEL		7	d	0.89		mg/kg soil	100	87129
Endosulfan	Pheretima posthuma, Indian Earthworm	BCM	ENZ	AMYL	LOAEL		1	d	2		ppm	100	81473
Endosulfan	Pheretima posthuma, Indian Earthworm	BCM	ENZ	GSTR	LOAEL		7	d	1		ppm	100	104501
Endosulfan	Pheretima posthuma, Indian Earthworm	BCM	BCM	PRCO	NOAEL		28	d	1		ppm	100	104501
Endosulfan	Aporrectodea trapezoides, Worm	GRO	GRO	WGHT	NOAEL		35	d	1.9		ml/L	100	102139
Endosulfan	Aporrectodea trapezoides, Worm	GRO	GRO	WGHT	LOAEL		38	d	1.9		ml/L	100	102139
Endosulfan	Aporrectodea trapezoides, Worm	GRO	GRO	WGHT	NOAEL		38	d	1.9		ml/L	100	102139
Endosulfan	Lumbricus terrestris, Earthworm	GRO	GRO	GRRT	LOAEL		2	d	1.13		mg/kg soil	100	86741

Table H-10 Worm and Nematode Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt 2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Lumbricus terrestris, Earthworm	GRO	GRO	GRRT	LOAEL		7	d	0.89		mg/kg soil	100	86741
Endosulfan	Lumbricus terrestris, Earthworm	GRO	GRO	GRRT	LOAEL		15	d	0.81		mg/kg soil	100	86741
Endosulfan	Lumbricus terrestris, Earthworm	GRO	GRO	GRRT	LOAEL		2	d	1.13		mg/kg soil	100	87129
Endosulfan	Amyntas rodericensis, Earthworm	MOR	MOR	SURV	LOAEL		28	d	1		Al kg/ha	100	86931
Endosulfan	Aporrectodea trapezoides, Worm	MOR	MOR	MORT	NOAEL		35	d	19		ml/L	100	102139
Endosulfan	Aporrectodea trapezoides, Worm	MOR	MOR	MORT	NOAEL		38	d	19		ml/L	100	102139
Endosulfan	Aporrectodea trapezoides, Worm	MOR	MOR	MORT	NOAEL	LOAEL	38	d	1.9	19	ml/L	100	102139
Endosulfan	Aporrectodea trapezoides, Worm	MOR	MOR	MORT	NOAEL		38	d	1.9		ml/L	100	102139
Endosulfan	Eisenia andrei, Earthworm	MOR	MOR	MORT	LC50		14	d	9.4		mg/kg soil	100	40544
Endosulfan	Eisenia fetida, earthworm	MOR	MOR	MORT	LC50		2	d	24		Al ug/cm2	100	40531
Endosulfan	Lumbricus terrestris, Earthworm	MOR	MOR	MORT	LC10		15	d	0.81		mg/kg soil	100	86741
Endosulfan	Lumbricus terrestris, Earthworm	MOR	MOR	MORT	LC25		15	d	1.88		mg/kg soil	100	86741
Endosulfan	Lumbricus terrestris, Earthworm	MOR	MOR	MORT	LC50		15	d	3.36		mg/kg soil	100	86741
Endosulfan	Lumbricus terrestris, Earthworm	MOR	MOR	MORT	LC10		2	d	1.13		mg/kg soil	100	87129
Endosulfan	Lumbricus terrestris, Earthworm	MOR	MOR	MORT	LC10		7	d	0.89		mg/kg soil	100	87129
Endosulfan	Lumbricus terrestris, Earthworm	MOR	MOR	MORT	LC10		15	d	0.81		mg/kg soil	100	87129
Endosulfan	Lumbricus terrestris, Earthworm	MOR	MOR	MORT	LC25		2	d	5.32		mg/kg soil	100	87129

Table H-10 Worm and Nematode Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt 2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Lumbricus terrestris, Earthworm	MOR	MOR	MORT	LC25		7	d	2.72		mg/kg soil	100	87129
Endosulfan	Lumbricus terrestris, Earthworm	MOR	MOR	MORT	LC25		15	d	1.88		mg/kg soil	100	87129
Endosulfan	Lumbricus terrestris, Earthworm	MOR	MOR	MORT	LC50		2	d	12.29		mg/kg soil	100	87129
Endosulfan	Lumbricus terrestris, Earthworm	MOR	MOR	MORT	LC50		7	d	5.82		mg/kg soil	100	87129
Endosulfan	Lumbricus terrestris, Earthworm	MOR	MOR	MORT	LC50		15	d	3.36		mg/kg soil	100	87129
Endosulfan	Drawida willsi, Field earthworm	POP	POP	ABND	LOAEL		40	d	0.35		ml/L	35	87653
Endosulfan	Aporrectodea trapezoides, Worm	REP	REP	PROG	LOAEL		38	d	1.9		ml/L	100	102139
Nematodes													
Endosulfan	Heterorhabditis sp., Nematode	MOR	MOR	MORT	LT50		5	d	2		AI %	100	69366
Endosulfan	Heterorhabditis sp., Nematode	MOR	MOR	MORT	LT50		-8	d	1		AI %	100	69366
Endosulfan	Heterorhabditis sp., Nematode	MOR	MOR	MORT	LT50		10	d	0.5		AI %	100	69366

Table H-11.Arthropod Data from ECOTOX

Table H-11. Arthropod data from ECOTOX. Data are arranged in alphabetical order by Effect Group. The code list for ECOTOX can be found at: <http://cfpub.epa.gov/ecotox/blackbox/help/codelist.pdf>.

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Mamestra brassicae, Cabbage moth	BCM	ENZ	NCCR	LOEC		2	d	50		ppm	100	16009
Endosulfan	Mamestra brassicae, Cabbage moth	BCM	ENZ	GSTR	NOEC		2	d	50		ppm	100	16009
Endosulfan	Mamestra brassicae, Cabbage moth	BCM	ENZ	GSTR	NOEC		2	d	50		ppm	100	16009
Endosulfan	Mamestra brassicae, Cabbage moth	BCM	ENZ	GSTR	LOEC		2	d	1		ppm	100	16009
Endosulfan	Mamestra brassicae, Cabbage moth	BCM	ENZ	GSTR	LOEC		2	d	50		ppm	100	16009
Endosulfan	Mamestra brassicae, Cabbage moth	BCM	ENZ	AEPX	LOEC		2	d	1		ppm	100	16009
Endosulfan	Mamestra brassicae, Cabbage moth	BCM	ENZ	NCCR	NOEC		2	d	1		ppm	100	16009
Endosulfan	Mamestra brassicae, Cabbage moth	BCM	ENZ	NCCR	LOEC		2	d	1		ppm	100	16009
Endosulfan	Mamestra brassicae, Cabbage moth	BCM	ENZ	GSTR	NOEC		2	d	1		ppm	100	16009
Endosulfan	Mamestra brassicae, Cabbage moth	BCM	ENZ	GSTR	NOEC		2	d	1		ppm	100	16009
Endosulfan	Mamestra brassicae, Cabbage moth	BCM	ENZ	GSTR	LOEC		2	d	1		ppm	100	16009
Endosulfan	Mamestra brassicae, Cabbage moth	BCM	ENZ	NCCR	NOEC		2	d	50		ppm	100	16009
Endosulfan	Mamestra brassicae, Cabbage moth	BCM	ENZ	AEPX	LOEC		2	d	50		ppm	100	16009
Endosulfan	Mamestra brassicae, Cabbage moth	BCM	ENZ	GSTR	LOEC		2	d	50		ppm	100	16009
Endosulfan	Orthosia gothica, Hebrew Character Moth	BCM	ENZ	GSTR	LOAEL		1	d	2.45		ppm	35	48910
Endosulfan	Oryctes nasicornis, European Rhinoceras Beetle	BCM	ENZ	NCCR	NOAEL	LOAEL	4	d	21	42	ppm	35	48911

Table H-11 Arthropod Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Phyllopertha horticola, Garden Chafer	BCM	ENZ	NCCR	NOAEL	LOAEL	4	d	10.5	21	ppm	35	48911
Endosulfan	Spodoptera litura, Common cutworm	BCM	HRM	GHRM	NOAEL		1	d	1.96		mg	94.8	90664
Endosulfan	Xylena vetusta, Red Sword Grass Moth	BCM	ENZ	GSTR	NOAEL		1	d	2.45		ppm	35	48910
Endosulfan	Allorhogas pyralophagus, Ichneumonid wasp	BEH	FDB	FDNG	LOAEL		42	d	0.0245		%	35	90487
Endosulfan	Apis mellifera, Honey bee	BEH	BEH	ACTP	NOAEL	LOAEL	11	d	4	8	ppm	97.3	81828
Endosulfan	Apis mellifera, Honey bee	BEH	FDB	FCNS	NOAEL		11	d	8		ppm	97.3	81828
Endosulfan	Apis mellifera, Honey bee	BEH	BEH	ATSK	LOAEL		0.04	d	0.22224		ul	27.78	46799
Endosulfan	Apis mellifera, Honey bee	BEH	BEH	ATSK	LOAEL		0.04	d	0.0005		ul	0.5	46799
Endosulfan	Apis sp., Bee	BEH	FDB	FDNG	LOAEL		1	d	0.035		%	100	92825
Endosulfan	Spodoptera litura, Common cutworm	BEH	BEH	FLIT	NOAEL		1	d	300		ug	94.8	90664
Endosulfan	Bombyx mori, Silkworm	GRO	GRO	WGHT	LOAEL		NR	pm	1		ai kg/ha	100	88892
Endosulfan	Bombyx mori, Silkworm	GRO	MPH	WGHT	LOAEL		NR	slk	1		ai kg/ha	100	88892
Endosulfan	Bombyx mori, Silkworm	GRO	DVP	PUPA	NOAEL		NR	lvp	1		ai kg/ha	100	88892
Endosulfan	Bracon sp., Wasp	GRO	DVP	EMRG	LOAEL		126	d	700		Al g/ha	100	98983
Endosulfan	Bracon sp., Wasp	GRO	DVP	EMRG	LOAEL		129	d	700		Al g/ha	100	98983
Endosulfan	Chelonus blackburni, Braconid Wasp	GRO	DVP	EMRG	LOAEL		NR	em	0.07		%	100	93337
Endosulfan	Chelonus blackburni, Braconid Wasp	GRO	DVP	EMRG	LOAEL		NR	em	0.07		%	100	93337

Table H-11 Arthropod Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Chrysoperla carnea, Common green lacewing	GRO	DVP	EMRG	NOAEL		NR	em	0.07		%	100	71451
Endosulfan	Diaeretiella rapae, Parasitoid Wasp	GRO	DVP	EMRG	LOAEL		8	d	0.0245		%	35	101406
Endosulfan	Diaeretiella rapae, Parasitoid Wasp	GRO	DVP	EMRG	LOAEL		1	d	0.035		%	100	92825
Endosulfan	Glyptapanteles militaris, Braconid Wasp	GRO	DVP	EMRG	LOAEL		NR	em	0.2275		%	35	69220
Endosulfan	Glyptapanteles militaris, Braconid Wasp	GRO	DVP	EMRG	LOAEL		NR	em	0.2275		%	35	69220
Endosulfan	Ophiomya phaseoli, Bean Fly	GRO	DVP	EMRG	LOAEL		28	d	5		ai g/kg sd	50	89242
Endosulfan	Ophiomya phaseoli, Bean Fly	GRO	DVP	EMRG	LOAEL		28	d	5		ai g/kg sd	50	89242
Endosulfan	Phthorimaea operculella, Potato Tuberworm	GRO	DVP	EMRG	NOAEL		<=14	d	58.8		ppm	100	99807
Endosulfan	Trichogramma achaeae, Parasitoid Wasp	GRO	DVP	EMRG	LOAEL		NR	em	0.28		%	100	103804
Endosulfan	Trichogramma achaeae, Parasitoid Wasp	GRO	DVP	EMRG	LOAEL		NR	em	0.28		%	100	103804
Endosulfan	Trichogramma achaeae, Parasitoid Wasp	GRO	DVP	EMRG	LOAEL		NR	em	0.28		%	100	103804
Endosulfan	Trichogramma achaeae, Parasitoid Wasp	GRO	DVP	EMRG	LOAEL		NR	em	0.28		%	100	103804
Endosulfan	Trichogramma achaeae, Parasitoid Wasp	GRO	DVP	EMRG	LOAEL		NR	em	0.28		%	100	103804
Endosulfan	Trichogramma achaeae, Parasitoid Wasp	GRO	DVP	EMRG	LOAEL		NR	em	0.28		%	100	103804
Endosulfan	Trichogramma achaeae, Parasitoid Wasp	GRO	DVP	EMRG	LOAEL		NR	em	0.28		%	100	103804
Endosulfan	Trichogramma achaeae, Parasitoid Wasp	GRO	DVP	EMRG	LOAEL		NR	em	0.28		%	100	103804
Endosulfan	Trichogramma achaeae, Parasitoid Wasp	GRO	DVP	EMRG	LOAEL		NR	em	0.28		%	100	103804
Endosulfan	Trichogramma chilonis, Parastic Wasp	GRO	DVP	EMRG	LOAEL		0.02	d	1000		ml/acre	100	93333

Table H-11 Arthropod Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Trichogramma chilonis, Parasitic Wasp	GRO	DVP	EMRG	LOAEL		NR	em	350		g/l	100	104985
Endosulfan	Trichogramma cordubensis, Wasp	GRO	DVP	EMRG	LOAEL		NR	em	0.2275		%	35	69714
Endosulfan	Trichogramma cordubensis, Wasp	GRO	DVP	EMRG	LOAEL		NR	em	0.2275		%	35	69714
Endosulfan	Trichogramma cordubensis, Wasp	GRO	DVP	EMRG	LOAEL		NR	em	0.2275		%	35	69714
Endosulfan	Trichogramma cordubensis, Wasp	GRO	DVP	EMRG	LOAEL		NR	em	0.2275		%	35	69714
Endosulfan	Trichogramma cordubensis, Wasp	GRO	DVP	EMRG	LOAEL		NR	em	0.2275		%	35	69714
Endosulfan	Trichogramma cordubensis, Wasp	GRO	DVP	EMRG	LOAEL		NR	em	0.2275		%	35	69714
Endosulfan	Trichogramma pretiosum, Parasitic wasp	GRO	DVP	EMRG	LOAEL		NR	em	875		Al g/300 L	100	88020
Endosulfan	Trichogramma pretiosum, Parasitic wasp	GRO	DVP	EMRG	LOAEL		NR	em	875		Al g/300 L	100	88020
Endosulfan	Trichogramma pretiosum, Parasitic wasp	GRO	DVP	EMRG	LOAEL		NR	em	875		Al g/300 L	100	88020
Endosulfan	Trichogramma pretiosum, Parasitic wasp	GRO	DVP	EMRG	LOAEL		NR	em	875		Al g/300 L	100	88020
Endosulfan	Adalia bipuncata, Two Spotted Lady Beetle	MOR	MOR	MORT	NR-LETH			d	0.1		%	100	64265
Endosulfan	Adalia bipuncata, Two Spotted Lady Beetle	MOR	MOR	MORT	NR-LETH	7		d	0.1		%	100	64265
Endosulfan	Adalia bipuncata, Two Spotted Lady Beetle	MOR	MOR	MORT	NR-LETH	7		d	0.1		%	100	64265
Endosulfan	Adalia bipuncata, Two Spotted Lady Beetle	MOR	MOR	MORT	NR-LETH	7		d	0.1		%	100	64265
Endosulfan	Adalia bipuncata, Two Spotted Lady Beetle	MOR	MOR	MORT	NR-LETH	7		d	0.1		%	100	64265
Endosulfan	Adalia bipuncata, Two Spotted Lady Beetle	MOR	MOR	MORT	NR-LETH	7		d	0.1		%	100	64265

Table H-11 Arthropod Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Adalia bipuncata, Two Spotted Lady Beetle	MOR	MOR	MORT	NR-LETH			d	0.1		%	100	64265
Endosulfan	Adalia bipuncata, Two Spotted Lady Beetle	MOR	MOR	MORT	NR-ZERO	7		d	0.1		%	100	64265
Endosulfan	Aenasius advena, Parasitic Wasp	MOR	MOR	MORT	NR-ZERO	7		d	0.07		%	100	51860
Endosulfan	Aenasius advena, Parasitic Wasp	MOR	MOR	MORT	NR-LETH	0.125		d	0.07		%	100	51860
Endosulfan	Allorhogas pyralophagus, Ichneumonid wasp	MOR	MOR	MORT	NR-LETH	1		d	0.0245		%	35	90487
Endosulfan	Anadevidia peponis, Moth	MOR	MOR	MORT	LOAEL	1	1	d	0.05		%	100	89403
Endosulfan	Anagyrus dactylopii, Parasitic Wasp	MOR	MOR	MORT	NR-LETH			d	0.07		%	100	97981
Endosulfan	Anicetus ceylonensis, Parasitic Wasp	MOR	MOR	MORT	NR-LETH	0.25		d	0.07		%	100	62599
Endosulfan	Anthonomus grandis, Boll weevil	MOR	MOR	MORT	LOAEL	0.04	2	d	0.56		ai kg/ha	100	92637
Endosulfan	Apanteles sp., Braconid Wasp	MOR	MOR	MORT	NR-LETH			d	0.07		%	100	93426
Endosulfan	Apanteles subandinus, Potato Moth Parasite	MOR	MOR	MORT	LC50	0.125	1	d	0.000018		AI g/ml	100	73144
Endosulfan	Aphis gossypii, Cotton aphid	MOR	MOR	MORT	LC50		1	d	113.25		ppm	100	82824
Endosulfan	Aphytis melinus, Thrip	MOR	MOR	MORT	LT50		>4	d	0.477		AI % w/w	25	98221
Endosulfan	Aphytis melinus, Thrip	MOR	MOR	MORT	LT50		>4	d	0.0477		AI % w/w	25	98221
Endosulfan	Apis cerana, Asiatic Honey Bee	MOR	MOR	MORT	LOAEL		1	d	0.05		%	100	88463
Endosulfan	Apis cerana, Asiatic Honey Bee	MOR	MOR	MORT	LOAEL		1	d	0.05		%	100	88463
Endosulfan	Apis cerana, Thai Honey Bee	MOR	MOR	MORT	LD50		1	d	0.17955		ug/bee	35	94337

Table H-11 Arthropod Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Apis cerana, Thai Honey Bee	MOR	MOR	MORT	LD50		1	d	1.6		ug/bee	100	91623
Endosulfan	Apis cerana, Thai Honey Bee	MOR	MOR	MORT	LD50		1	d	1.15		ug/bee	100	91623
Endosulfan	Apis cerana, Thai Honey Bee	MOR	MOR	MORT	LD50		1	d	1.4		ug/bee	100	91623
Endosulfan	Apis cerana, Thai Honey Bee	MOR	MOR	MORT	LD50		1	d	1.34		ug/bee	100	91623
Endosulfan	Apis cerana, Thai Honey Bee	MOR	MOR	MORT	LD50		1	d	1.23		ug/bee	100	91623
Endosulfan	Apis cerana, Thai Honey Bee	MOR	MOR	MORT	LD50		1	d	1.58		ug/bee	100	91623
Endosulfan	Apis florea, Dwarf Honey Bee	MOR	MOR	MORT	NR-LETH			d	0.07		%	100	92603
Endosulfan	Apis florea, Dwarf Honey Bee	MOR	MOR	MORT	LOAEL		0.04	d	0.07		%	100	92603
Endosulfan	Apis mellifera, Honey bee	MOR	MOR	MORT	LD10		NA	em	9.524		ug/org	97.2	70351
Endosulfan	Apis mellifera, Honey bee	MOR	MOR	MORT	LD50		NA	em	109.5		ug/org	97.2	70351
Endosulfan	Apis mellifera, Honey bee	MOR	MOR	MORT	LD90		NA	em	1260		ug/org	97.2	70351
Endosulfan	Apis mellifera, Honey bee	MOR	MOR	MORT	LD10		NA	em	1.022		ug/org	97.2	70351
Endosulfan	Apis mellifera, Honey bee	MOR	MOR	MORT	LD50		NA	em	14.42		ug/org	97.2	70351
Endosulfan	Apis mellifera, Honey bee	MOR	MOR	MORT	LD90		NA	em	203.3		ug/org	97.2	70351
Endosulfan	Apis mellifera, Honey bee	MOR	MOR	MORT	LD10		NA	em	1.041		ug/org	97.2	70351
Endosulfan	Apis mellifera, Honey bee	MOR	MOR	MORT	LD50		NA	em	13.88		ug/org	97.2	70351
Endosulfan	Apis mellifera, Honey bee	MOR	MOR	MORT	LD90		NA	em	185.2		ug/org	97.2	70351

Table H-11 Arthropod Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Apis mellifera, Honey bee	MOR	MOR	MORT	LD10		NA	em	1.404		ug/org	97.2	70351
Endosulfan	Apis mellifera, Honey bee	MOR	MOR	MORT	LD50		NA	em	28.14		ug/org	97.2	70351
Endosulfan	Apis mellifera, Honey bee	MOR	MOR	MORT	LD90		NA	em	564		ug/org	97.2	70351
Endosulfan	Apis mellifera, Honey bee	MOR	MOR	MORT	LD10		NA	em	8.95		ug/org	97.2	70351
Endosulfan	Apis mellifera, Honey bee	MOR	MOR	MORT	LD50		NA	em	21.79		ug/org	97.2	70351
Endosulfan	Apis mellifera, Honey bee	MOR	MOR	MORT	LD90		NA	em	53.05		ug/org	97.2	70351
Endosulfan	Apis mellifera, Honey bee	MOR	MOR	MORT	NR-ZERO			d	1		lb/acre	100	57089
Endosulfan	Apis mellifera, Honey bee	MOR	MOR	MORT	NR-ZERO	NR-LETH 2	0.75	d	0.1	1	%	>=95	70979
Endosulfan	Apis mellifera, Honey bee	MOR	MOR	MORT	NOAEL		11	d	8		ppm	97.3	81828
Endosulfan	Apis mellifera, Honey bee	MOR	MOR	MORT	LD50		1	d	4.45		ug/bee	100	91623
Endosulfan	Apis mellifera, Honey bee	MOR	MOR	MORT	LD50		1	d	6.11		ug/bee	100	91623
Endosulfan	Apis mellifera, Honey bee	MOR	MOR	MORT	LD50		1	d	6.3		ug/bee	100	91623
Endosulfan	Apis mellifera, Honey bee	MOR	MOR	MORT	LD50		1	d	4.86		ug/bee	100	91623
Endosulfan	Apis mellifera, Honey bee	MOR	MOR	MORT	LD50		1	d	9.5		ug/bee	100	91623
Endosulfan	Apis mellifera, Honey bee	MOR	MOR	MORT	LD50		1	d	7.62		ug/bee	100	91623
Endosulfan	Apis mellifera, Honey bee	MOR	MOR	MORT	LD50		1	d	6.83		ug/bee	100	91623
Endosulfan	Apis mellifera, Honey bee	MOR	MOR	MORT	LD50		1	d	5.87		ug/bee	100	91623

Table H-11 Arthropod Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Apis mellifera, Honey bee	MOR	MOR	MORT	LD50		1	d	5.51		ug/bee	100	91623
Endosulfan	Apis mellifera, Honey bee	MOR	MOR	MORT	LD50		1	d	6.15		ug/bee	100	91623
Endosulfan	Apis mellifera, Honey bee	MOR	MOR	MORT	LD50		1	d	5.85		ug/bee	100	91623
Endosulfan	Apis mellifera, Honey bee	MOR	MOR	MORT	LD50		1	d	5.08		ug/bee	100	91623
Endosulfan	Apis mellifera, Honey bee	MOR	MOR	MORT	LD50		1	d	4.82		ug/bee	100	91623
Endosulfan	Apis mellifera, Honey bee	MOR	MOR	MORT	LD50		1	d	4.43		ug/bee	100	91623
Endosulfan	Apis mellifera, Honey bee	MOR	MOR	MORT	LD50		1	d	7.1		ug	100	96420
Endosulfan	Apis mellifera, Honey bee	MOR	MOR	MORT	LD90		1	d	13		ug	100	96420
Endosulfan	Apis mellifera, Honey bee	MOR	MOR	MORT	LD50		1	d	6.9		ug	100	96420
Endosulfan	Apis mellifera, Honey bee	MOR	MOR	MORT	LD90		1	d	43		ug	100	96420
Endosulfan	Apis mellifera, Honey bee	MOR	MOR	MORT	LD50		1	d	0.88		ug	20	71070
Endosulfan	Apis mellifera, Honey bee	MOR	MOR	MORT	NR-LETH			d	4.8		oz/ac	20	71070
Endosulfan	Apis mellifera, Honey bee	MOR	MOR	MORT	NOAEL	LOAEL 0.04	0.04	d	0.6	0.8	oz/ac	20	71070
Endosulfan	Apis mellifera, Honey bee	MOR	MOR	MORT	NOAEL	LOAEL	1	d	0.1	1	% w/v	20	71070
Endosulfan	Apis mellifera, Honey bee	MOR	MOR	MORT	NOAEL	LOAEL	1	d	0.02	0.1	% w/v	20	71070
Endosulfan	Apis mellifera, Honey bee	MOR	MOR	MORT	NR-LETH			d	0.3		% w/v	20	71070
Endosulfan	Archegozetes longisetosus, Mite	MOR	MOR	MORT	NR-LETH			d	0.875		L/ha	35	58741

Table H-11 Arthropod Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Bemisia tabaci, Sweetpotato whitefly	MOR	MOR	MORT	LC50		~1	d	>500 TO <1000			100	81336
Endosulfan	Bemisia tabaci, Sweetpotato whitefly	MOR	MOR	MORT	LC50		~1	d	>1000 TO <1500	ug/ml		100	81336
Endosulfan	Bemisia tabaci, Sweetpotato whitefly	MOR	MOR	MORT	LC50		~1	d	>1000 TO <1500	ug/ml		100	81336
Endosulfan	Bemisia tabaci, Sweetpotato whitefly	MOR	MOR	MORT	LC50		~1	d	>500 TO <1000	ug/ml		100	81336
Endosulfan	Bemisia tabaci, Sweetpotato whitefly	MOR	MOR	MORT	LC50		~1	d	~ 1000	ug/ml	ug/ml	100	81336
Endosulfan	Bemisia tabaci, Sweetpotato whitefly	MOR	MOR	MORT	LC50		~1	d	~ 1000		ug/ml	100	81336
Endosulfan	Bemisia tabaci, Sweetpotato whitefly	MOR	MOR	MORT	LC50		~1	d	>1000 TO <1500			100	81336
Endosulfan	Bemisia tabaci, Sweetpotato whitefly	MOR	MOR	MORT	LC50		~1	d	~ 2500	ug/ml	ug/ml	100	81336
Endosulfan	Bemisia tabaci, Sweetpotato whitefly	MOR	MOR	MORT	LC50		~1	d	~ 500		ug/ml	100	81336
Endosulfan	Bemisia tabaci, Sweetpotato whitefly	MOR	MOR	MORT	LC50		~1	d	>0 TO <500			100	81336
Endosulfan	Bemisia tabaci, Sweetpotato whitefly	MOR	MOR	MORT	LC50		~1	d	>500 TO <1000	ug/ml		100	81336
Endosulfan	Bemisia tabaci, Sweetpotato whitefly	MOR	MOR	MORT	LC50		~1	d	>1000 TO <1500	ug/ml		100	81336
Endosulfan	Bemisia tabaci, Sweetpotato whitefly	MOR	MOR	MORT	LC50		~1	d	>500 TO <1000	ug/ml		100	81336
Endosulfan	Bemisia tabaci, Sweetpotato whitefly	MOR	MOR	MORT	LC50		~1	d	>1500 TO <2000	ug/ml		100	81336
Endosulfan	Bemisia tabaci, Sweetpotato whitefly	MOR	MOR	MORT	LC50		~1	d	>1500 TO <2000	ug/ml		100	81336
Endosulfan	Bemisia tabaci, Sweetpotato whitefly	MOR	MOR	MORT	LC50		~1	d	>1000 TO <1500	ug/ml		100	81336
Endosulfan	Bemisia tabaci, Sweetpotato whitefly	MOR	MOR	MORT	LC50		~1	d	~ 1000	ug/ml	ug/ml	100	81336

Table H-11 Arthropod Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Bemisia tabaci, Sweetpotato whitefly	MOR	MOR	MORT	LC50		~1	d	>2500 TO <3000			100	81336
Endosulfan	Bemisia tabaci, Sweetpotato whitefly	MOR	MOR	MORT	LC50		~1	d	>500 TO <1000	ug/ml		100	81336
Endosulfan	Bemisia tabaci, Sweetpotato whitefly	MOR	MOR	MORT	LC50		~1	d	>500 TO <1000	ug/ml		100	81336
Endosulfan	Bemisia tabaci, Sweetpotato whitefly	MOR	MOR	MORT	LC50		~1	d	>0 TO <500	ug/ml		100	81336
Endosulfan	Bemisia tabaci, Sweetpotato whitefly	MOR	MOR	MORT	LC50		~1	d	>0 TO <500	ug/ml		100	81336
Endosulfan	Bemisia tabaci, Sweetpotato whitefly	MOR	MOR	MORT	LC50		~1	d	>0 TO <500	ug/ml		100	81336
Endosulfan	Bemisia tabaci, Sweetpotato whitefly	MOR	MOR	MORT	LC50		~1	d	>0 TO <500	ug/ml		100	81336
Endosulfan	Bemisia tabaci, Sweetpotato whitefly	MOR	MOR	MORT	LC50		~1	d	>0 TO <500	ug/ml	ug/ml	100	81336
Endosulfan	Bemisia tabaci, Sweetpotato whitefly	MOR	MOR	MORT	LC50		~1	d	>0 TO <500			100	81336
Endosulfan	Bemisia tabaci, Sweetpotato whitefly	MOR	MOR	MORT	LC50		~1	d	>0 TO <500	ug/ml		100	81336
Endosulfan	Bemisia tabaci, Sweetpotato whitefly	MOR	MOR	MORT	LC50		~1	d	>0 TO <500	ug/ml		100	81336
Endosulfan	Bemisia tabaci, Sweetpotato whitefly	MOR	MOR	MORT	LC50		~1	d	>0 TO <500	ug/ml		100	81336
Endosulfan	Bemisia tabaci, Sweetpotato whitefly	MOR	MOR	MORT	LC50		~1	d	>0 TO <500	ug/ml		100	81336
Endosulfan	Bemisia tabaci, Sweetpotato whitefly	MOR	MOR	MORT	LC50		~1	d	>0 TO <500	ug/ml		100	81336
Endosulfan	Bemisia tabaci, Sweetpotato whitefly	MOR	MOR	MORT	LC50		~1	d	>0 TO <500	ug/ml		100	81336
Endosulfan	Bemisia tabaci, Sweetpotato whitefly	MOR	MOR	MORT	LC50		~1	d	>0 TO <500	ug/ml		100	81336

ug/ml

Table H-11 Arthropod Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Bemisia tabaci, Sweetpotato whitefly	MOR	MOR	MORT	LC50		~1	d	>0 TO <500			100	81336
Endosulfan	Bemisia tabaci, Sweetpotato whitefly	MOR	MOR	MORT	LC50		~1	d	>0 TO <500	ug/ml		100	81336
Endosulfan	Bemisia tabaci, Sweetpotato whitefly	MOR	MOR	MORT	LC50		~1	d	>0 TO <500	ug/ml		100	81336
Endosulfan	Bemisia tabaci, Sweetpotato whitefly	MOR	MOR	MORT	LC50		~1	d	>0 TO <500	ug/ml		100	81336
Endosulfan	Bemisia tabaci, Sweetpotato whitefly	MOR	MOR	MORT	LC50		~1	d	>0 TO <500	ug/ml		100	81336
Endosulfan	Bemisia tabaci, Sweetpotato whitefly	MOR	MOR	MORT	LC50		~1	d	~ 500	ug/ml	ug/ml	100	81336
Endosulfan	Bemisia tabaci, Sweetpotato whitefly	MOR	MOR	MORT	LC50		1	d	2418		mg/L	100	71999
Endosulfan	Bemisia tabaci, Sweetpotato whitefly	MOR	MOR	MORT	LC50		1	d	2920		mg/L	100	71999
Endosulfan	Bemisia tabaci, Sweetpotato whitefly	MOR	MOR	MORT	LC50		1	d	2970		mg/L	100	71999
Endosulfan	Bemisia tabaci, Sweetpotato whitefly	MOR	MOR	MORT	LC50		1	d	3960		mg/L	100	71999
Endosulfan	Bemisia tabaci, Sweetpotato whitefly	MOR	MOR	MORT	LC50		1	d	5830		mg/L	100	71999
Endosulfan	Bemisia tabaci, Sweetpotato whitefly	MOR	MOR	MORT	LC50		1	d	3290		mg/L	100	71999
Endosulfan	Bemisia tabaci, Sweetpotato whitefly	MOR	MOR	MORT	LC50		1	d	2160		mg/L	100	71999
Endosulfan	Bemisia tabaci, Sweetpotato whitefly	MOR	MOR	MORT	LC50		1	d	1970		mg/L	100	71999
Endosulfan	Bemisia tabaci, Sweetpotato whitefly	MOR	MOR	MORT	LC50		1	d	3060		mg/L	100	71999
Endosulfan	Bemisia tabaci, Sweetpotato whitefly	MOR	MOR	MORT	LC50		1	d	2900		mg/L	100	71999
Endosulfan	Bemisia tabaci, Sweetpotato whitefly	MOR	MOR	MORT	LC50		1	d	3260		mg/L	100	71999

Table H-11 Arthropod Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Bemisia tabaci, Sweetpotato whitefly	MOR	MOR	MORT	LC50		1	d	2550		mg/L	100	71999
Endosulfan	Bemisia tabaci, Sweetpotato whitefly	MOR	MOR	MORT	LC50		1	d	2530		mg/L	100	71999
Endosulfan	Blepyrus insularis, Parasitic Wasp	MOR	MOR	MORT	NR-LETH			d	0.07		%	100	51860
Endosulfan	Bombyx mori, Silkworm	MOR	MOR	MORT	NR-LETH	0.08		d	0.07		%	100	91044
Endosulfan	Bombyx mori, Silkworm	MOR	MOR	MORT	NR-LETH	7		d	0.07		%	100	91044
Endosulfan	Bombyx mori, Silkworm	MOR	MOR	MORT	NR-LETH	7		d	0.07		%	100	91044
Endosulfan	Bombyx mori, Silkworm	MOR	MOR	MORT	NR-LETH	7		d	0.07		%	100	91044
Endosulfan	Bombyx mori, Silkworm	MOR	MOR	MORT	NR-LETH	7		d	0.07		%	100	91044
Endosulfan	Bombyx mori, Silkworm	MOR	MOR	MORT	NR-LETH	7		d	0.07		%	100	91044
Endosulfan	Bombyx mori, Silkworm	MOR	MOR	MORT	NR-LETH	10		d	0.07		%	100	91044
Endosulfan	Bombyx mori, Silkworm	MOR	MOR	MORT	NR-LETH	10		d	0.07		%	100	91044
Endosulfan	Bombyx mori, Silkworm	MOR	MOR	MORT	NR-LETH	10		d	0.07		%	100	91044
Endosulfan	Bombyx mori, Silkworm	MOR	MOR	MORT	NR-LETH	10		d	0.07		%	100	91044
Endosulfan	Bombyx mori, Silkworm	MOR	MOR	MORT	NR-LETH	10		d	0.07		%	100	91044
Endosulfan	Bombyx mori, Silkworm	MOR	MOR	MORT	NR-LETH	10		d	0.07		%	100	91044
Endosulfan	Bombyx mori, Silkworm	MOR	MOR	MORT	LOAEL	15	15	d	0.07		%	100	91044
Endosulfan	Bombyx mori, Silkworm	MOR	MOR	MORT	NR-LETH			d	0.07		%	100	91044
Endosulfan	Bombyx mori, Silkworm	MOR	MOR	MORT	LOAEL	15	15	d	0.07		%	100	91044

Table H-11 Arthropod Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Bombyx mori, Silkworm	MOR	MOR	MORT	LOAEL		15	d	0.07		%	100	91044
Endosulfan	Bombyx mori, Silkworm	MOR	MOR	MORT	NR-LETH			d	0.07		%	100	91044
Endosulfan	Bombyx mori, Silkworm	MOR	MOR	MORT	NR-LETH			d	0.07		%	100	91044
Endosulfan	Bombyx mori, Silkworm	MOR	MOR	MORT	LOAEL	7	15	d	0.07		%	100	91044
Endosulfan	Bombyx mori, Silkworm	MOR	MOR	MORT	LOAEL	10	<1	d	0.07		%	100	91044
Endosulfan	Bombyx mori, Silkworm	MOR	MOR	MORT	LOAEL		34.07	d	0.07		%	100	91044
Endosulfan	Bombyx mori, Silkworm	MOR	MOR	MORT	LOAEL		<1	d	0.07		%	100	91044
Endosulfan	Bombyx mori, Silkworm	MOR	MOR	MORT	LOAEL		33.07	d	0.07		%	100	91044
Endosulfan	Bombyx mori, Silkworm	MOR	MOR	MORT	LOAEL		33.07	d	0.07		%	100	91044
Endosulfan	Bracon hebetor, Wasp	MOR	MOR	MORT	LC50		1	d	38.5		ppm	35	10464 1
Endosulfan	Brevicoryne brassicae, Cabbage aphid	MOR	MOR	MORT	NR-LETH			d	42.08		ppm	100	89916
Endosulfan	Brevicoryne brassicae, Cabbage aphid	MOR	MOR	MORT	NR-LETH			d	41.26		ppm	100	89916
Endosulfan	Brevicoryne brassicae, Cabbage aphid	MOR	MOR	MORT	LC50	1	1	d	8.202		ppm	100	89916
Endosulfan	Brevicoryne brassicae, Cabbage aphid	MOR	MOR	MORT	LC90	1	1	d	15.31		ppm	100	89916
Endosulfan	Campoletis chloridae, Parasitic Wasp	MOR	MOR	MORT	NR-LETH			d	0.07		%	100	62600
Endosulfan	Cardiochiles nigriceps, Braconid Wasp	MOR	MOR	MORT	NR-LETH		0.125	d	1.05		Al kg/ha	100	93416
Endosulfan	Cardiochiles nigriceps, Braconid Wasp	MOR	MOR	MORT	NR-LETH			d	1.05		Al kg/ha	100	93416

Table H-11 Arthropod Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Catolaccus grandis, Ectoparasitoid Wasp	MOR	MOR	MORT	LC50		1	d	1.739		ug/eu	>95	63851
Endosulfan	Catolaccus grandis, Ectoparasitoid Wasp	MOR	MOR	MORT	LC50		1	d	1.37		ug/eu	>95	63851
Endosulfan	Catolaccus grandis, Ectoparasitoid Wasp	MOR	MOR	MORT	LC50		1	d	1.325		ug/eu	>95	63851
Endosulfan	Chelonus blackburni, Braconid Wasp	MOR	MOR	MORT	NR-LETH			d	0.15		%	100	93332
Endosulfan	Chelonus blackburni, Braconid Wasp	MOR	MOR	MORT	NR-LETH	0.25		d	0.07		%	100	93337
Endosulfan	Chelonus blackburni, Braconid Wasp	MOR	MOR	MORT	LT50	<=1	1.39	d	0.07		%	100	93337
Endosulfan	Chelonus blackburni, Braconid Wasp	MOR	MOR	MORT	LT90		0.55	d	0.07		%	100	93337
Endosulfan	Chiloloba acuta, Green Scarab Beetle	MOR	MOR	MORT	LOAEL		1	d	4		%	100	91620
Endosulfan	Choristoneura rosaceana, Oblique banded leaf roller	MOR	MOR	MORT	LC50		5	d	185		ppm	100	70966
Endosulfan	Choristoneura rosaceana, Oblique banded leaf roller	MOR	MOR	MORT	LC90		5	d	457		ppm	100	70966
Endosulfan	Choristoneura rosaceana, Oblique banded leaf roller	MOR	MOR	MORT	LC90		5	d	603		ppm	100	70966
Endosulfan	Choristoneura rosaceana, Oblique banded leaf roller	MOR	MOR	MORT	LC50		5	d	176		ppm	100	70966
Endosulfan	Chrysoperla carnea, Common green lacewing	MOR	MOR	MORT	NOAEL		1	d	0.07		%	100	71451
Endosulfan	Chrysoperla carnea, Common green lacewing	MOR	MOR	MORT	NOAEL		NR	em	0.07		%	100	71451
Endosulfan	Chrysoperla carnea, Common green lacewing	MOR	MOR	LIFE	LOAEL		≥ 15.3 3	d	0.07		%	100	71451
Endosulfan	Chrysoperla carnea, Common green lacewing	MOR	MOR	MORT	LOAEL		1	d	0.25		AI %	35	10433 9
Endosulfan	Chrysoperla carnea, Common green lacewing	MOR	MOR	HTCH	LOAEL		NR	ht	350		g/l	100	10498 5

Table H-11 Arthropod Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Coccidoxenoides perminutus, Parasitic Wasp	MOR	MOR	MORT	LC90		0.25	d	175.89		ml/100 L	100	93317
Endosulfan	Coccidoxenoides perminutus, Parasitic Wasp	MOR	MOR	MORT	LC50		0.25	d	58.71		ml/100 L	100	93317
Endosulfan	Coccinella repanda, Ladybird Beetle	MOR	MOR	MORT	LD50		2	d	8.1		AI ug/org	100	72656
Endosulfan	Coccinella repanda, Ladybird Beetle	MOR	MOR	MORT	LD50		2	d	34		AI ug/org	100	72656
Endosulfan	Colpoclypeus florus, Eulophid wasp	MOR	MOR	MORT	NR-LETH			d	450		ppm	100	63713
Endosulfan	Colpoclypeus florus, Eulophid wasp	MOR	MOR	MORT	NOAEL	LOAEL 1	2	d	45	225	ppm	100	63713
Endosulfan	Copidosoma koehleri, Chalcid Wasp	MOR	MOR	MORT	LC50		1	d	0.000041		AI g/ml	100	73144
Endosulfan	Cotesia marginiventris, Parasitic Wasp	MOR	MOR	MORT	NR-LETH			d	1.05		AI kg/ha	100	64166
Endosulfan	Cotesia marginiventris, Parasitic Wasp	MOR	MOR	MORT	NR-LETH	1		d	1.05		AI kg/ha	100	64166
Endosulfan	Cryptolaemus montrouzieri, Mealybug destroyer	MOR	MOR	MORT	LT50	1	7.38	d	0.0245		%	35	92067
Endosulfan	Cryptolaemus montrouzieri, Mealybug destroyer	MOR	MOR	MORT	LT50		<4	d	0.477		AI % w/w	25	98221
Endosulfan	Cryptolaemus montrouzieri, Mealybug destroyer	MOR	MOR	MORT	LT50		>4	d	0.0477		AI % w/w	25	98221
Endosulfan	Cylas formicarius, Sweetpotato Weevil	MOR	MOR	MORT	LD50		2	d	62.2944		ug/g wet wt	96	62617
Endosulfan	Cylas formicarius, Sweetpotato Weevil	MOR	MOR	MORT	LD90		2	d	296.3616		ug/g wet wt	96	62617
Endosulfan	Cylas formicarius, Sweetpotato Weevil	MOR	MOR	MORT	LD50		2	d	49.4016		ug/g wet wt	96	62617
Endosulfan	Cylas formicarius, Sweetpotato Weevil	MOR	MOR	MORT	LD90		2	d	249.0816		ug/g wet wt	96	62617
Endosulfan	Cylas formicarius, Sweetpotato Weevil	MOR	MOR	MORT	LD50		2	d	55.1424		ug/g wet wt	96	62617

Table H-11 Arthropod Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Cylas formicarius, Sweetpotato Weevil	MOR	MOR	MORT	LD90		2	d	265.8624		ug/g wet wt	96	62617
Endosulfan	Cyphoderus javanus, Springtail	MOR	MOR	MORT	NR-LETH			d	0.875		L/ha	35	58741
Endosulfan	Cyphoderus sp., Springtail	MOR	MOR	MORT	NR-LETH			d	0.1155		%	35	50746
Endosulfan	Cyphoderus sp., Springtail	MOR	MOR	MORT	NR-LETH	1		d	0.1155		%	35	50746
Endosulfan	Cyphoderus sp., Springtail	MOR	MOR	MORT	NR-LETH	3		d	3.5		ml/l	35	50746
Endosulfan	Cyphoderus sp., Springtail	MOR	MOR	MORT	LD50	3		d	0.9275		ml/l	35	50746
Endosulfan	Cyphoderus sp., Springtail	MOR	MOR	MORT	LD50	1	1	d	0.9275		ml/l	35	50746
Endosulfan	Dicladispa armigera, Rice Hispa	MOR	MOR	MORT	LOAEL		0.01	d	0.075		%	100	101340
Endosulfan	Diglyphus isaea, NR	MOR	MOR	HTCH	NOAEL		NR	ht	0.05		Al mg/cm2	35	103776
Endosulfan	Earias insulana, Egyptian Stemborer	MOR	MOR	MORT	LC50		1	d	4.6		ppm	100	82824
Endosulfan	Earias insulana, Egyptian Stemborer	MOR	MOR	MORT	LD50		1	d	0.97		ug/g	100	82824
Endosulfan	Earias vittella, Rough Bollworm	MOR	MOR	MORT	NR-LETH			d	0.06		%	100	53018
Endosulfan	Earias vittella, Rough Bollworm	MOR	MOR	MORT	LT50		0.51	d	0.06		%	100	53018
Endosulfan	Earias vittella, Rough Bollworm	MOR	MOR	MORT	LT50	2	0.43	d	0.06		%	100	53018
Endosulfan	Earias vittella, Rough Bollworm	MOR	MOR	MORT	NR-LETH			d	0.06		%	100	53018
Endosulfan	Encarsia formosa, Parasitic wasp	MOR	MOR	MORT	NR-ZERO			d	0.15		%	100	96254
Endosulfan	Encarsia perniciosi, Red Scale Parasite	MOR	MOR	MORT	LOAEL	2	0.08	d	0.05		%	100	93336
Endosulfan	Encarsia perniciosi, Red Scale Parasite	MOR	MOR	MORT	NR-LETH	14		d	0.05		%	100	93336

Table H-11 Arthropod Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Ephestia kuehniella, Mediterranean Flour Beetle	MOR	MOR	MORT	LD50		<=2	d	2		ug/g org	100	70625
Endosulfan	Euproctis subnotata, Hairy Caterpillar	MOR	MOR	MORT	NR-LETH			d	0.05		%	100	92543
Endosulfan	Euproctis subnotata, Hairy Caterpillar	MOR	MOR	MORT	LOAEL		1	d	0.05		%	100	92543
Endosulfan	Glyptapanteles militaris, Braconid Wasp	MOR	MOR	MORT	LOAEL	1	1	d	0.2275		%	35	69220
Endosulfan	Glyptapanteles militaris, Braconid Wasp	MOR	MOR	MORT	LOAEL		1	d	0.2275		%	35	69220
Endosulfan	Grapholita molesta, Oriental fruit moth	MOR	MOR	MORT	LC50		1	d	2.71		ug/eu	>=98	64709
Endosulfan	Grapholita molesta, Oriental fruit moth	MOR	MOR	MORT	LC50		1	d	3.88		ug/eu	>=98	64709
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD50		1	d	1.7423		ug/g	95	101076
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD90		1	d	9.53325		ug/g	95	101076
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD50		1	d	15.96285		ug/g	95	101076
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD90		1	d	65.54335		ug/g	95	101076
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD50		1	d	15.84885		ug/g	95	101076
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD90		1	d	64.59145		ug/g	95	101076
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD50		1	d	11.10835		ug/g	95	101076
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD90		1	d	51.44345		ug/g	95	101076
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD50		1	d	11.63465		ug/g	95	101076
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD90		1	d	101.9255		ug/g	95	101076

Table H-11 Arthropod Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD50		1	d	4.8773		ug/g	95	101076
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD90		1	d	100.27535		ug/g	95	101076
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD50		1	d	6.9293		ug/g	95	101076
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD90		1	d	51.84245		ug/g	95	101076
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD50		1	d	4.29495		ug/g	95	101076
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD90		1	d	37.6162		ug/g	95	101076
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD50		1	d	1.0089		ug/g	95	101076
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD90		1	d	3.97195		ug/g	95	101076
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD50		1	d	1.14095		ug/g	95	101076
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD90		1	d	4.4897		ug/g	95	101076
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LC50		3	d	1.155		ug/org	100	87785
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LC50		3	d	1.198		ug/org	100	87785
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LC50		3	d	1.49		ug/org	100	87785
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD50		6	d	0.65		ug/org	100	74171
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD90		6	d	1.8		ug/org	100	74171
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD50		6	d	0.63		ug/org	100	74171
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD90		6	d	1.7		ug/org	100	74171

Table H-11 Arthropod Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD50		6	d	0.44		ug/org	100	74171
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD90		6	d	1.5		ug/org	100	74171
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD50		6	d	0.67		ug/org	100	74171
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD90		6	d	1.5		ug/org	100	74171
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD50		6	d	1.7		ug/org	100	74171
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD90		6	d	7.7		ug/org	100	74171
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD90		6	d	22		ug/org	100	74171
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD50		6	d	3.4		ug/org	100	74171
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD50		6	d	2.2		ug/org	100	74171
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD90		6	d	16		ug/org	100	74171
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD90		6	d	10		ug/org	100	74171
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD50		6	d	2.1		ug/org	100	74171
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD50		6	d	3.1		ug/org	100	74171
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD90		6	d	21		ug/org	100	74171
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD90		6	d	11		ug/org	100	74171
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD50		6	d	1.7		ug/org	100	74171
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD50		6	d	3.1		ug/org	100	74171

Table H-11 Arthropod Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD90		6	d	32		ug/org	100	74171
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD90		6	d	23		ug/org	100	74171
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD50		6	d	1.7		ug/org	100	74171
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD50		6	d	1		ug/org	100	74171
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD90		6	d	17		ug/org	100	74171
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD90		6	d	37		ug/org	100	74171
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD50		6	d	2.5		ug/org	100	74171
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD50		6	d	2.9		ug/org	100	74171
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD90		6	d	27		ug/org	100	74171
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD90		6	d	70		ug/org	100	74171
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD50		6	d	4.4		ug/org	100	74171
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD50		6	d	2.5		ug/org	100	74171
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD90		6	d	23		ug/org	100	74171
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD90		6	d	10		ug/org	100	74171
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD50		6	d	2.9		ug/org	100	74171
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD50		6	d	2.6		ug/org	100	74171
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD90		6	d	57		ug/org	100	74171

Table H-11 Arthropod Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD90		6	d	22		ug/org	100	74171
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD50		6	d	4.8		ug/org	100	74171
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD50		6	d	2.7		ug/org	100	74171
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD90		6	d	20		ug/org	100	74171
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD90		6	d	12		ug/org	100	74171
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD50		6	d	2.6		ug/org	100	74171
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD50		6	d	4.5		ug/org	100	74171
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD90		6	d	29		ug/org	100	74171
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD90		6	d	2.3		ug/org	100	74171
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD50		6	d	0.5		ug/org	100	74171
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD50		6	d	9		ug/org	100	74171
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD90		6	d	23		ug/org	100	74171
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD90		6	d	6.3		ug/org	100	74171
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD50		6	d	1		ug/org	100	74171
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD50		6	d	3.5		ug/org	100	74171
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD90		6	d	17		ug/org	100	74171
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD90		6	d	6		ug/org	100	74171

Table H-11 Arthropod Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD50		6	d	1.4		ug/org	100	74171
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD50		6	d	1.4		ug/org	100	74171
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD90		6	d	16		ug/org	100	74171
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD90		6	d	27		ug/org	100	74171
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD50		6	d	5.7		ug/org	100	74171
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD50		6	d	2.8		ug/org	100	74171
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD90		6	d	23		ug/org	100	74171
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD90		6	d	34		ug/org	100	74171
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD50		6	d	6.7		ug/org	100	74171
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD50		6	d	16		ug/org	100	74171
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD90		6	d	172		ug/org	100	74171
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD90		6	d	8.8		ug/org	100	74171
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD50		6	d	1.7		ug/org	100	74171
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD50		6	d	3.9		ug/org	100	74171
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD90		6	d	18		ug/org	100	74171
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD90		6	d	135		ug/org	100	74171
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD50		6	d	10		ug/org	100	74171

Table H-11 Arthropod Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD50		6	d	6.8		ug/org	100	74171
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD90		6	d	49		ug/org	100	74171
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD90		6	d	15		ug/org	100	74171
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD50		6	d	3		ug/org	100	74171
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD50		6	d	2.4		ug/org	100	74171
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD90		6	d	13		ug/org	100	74171
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD90		6	d	4.3		ug/org	100	74171
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD50		6	d	0.88		ug/org	100	74171
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD50		6	d	3.9		ug/org	100	74171
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD90		6	d	44		ug/org	100	74171
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD90		6	d	8.1		ug/org	100	74171
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD50		6	d	1.6		ug/org	100	74171
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD50		6	d	18		ug/org	100	74171
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD90		6	d	66		ug/org	100	74171
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD90		6	d	1.7		ug/org	100	74171
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD50		6	d	0.49		ug/org	100	74171
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD50		6	d	9		ug/org	100	74171

Table H-11 Arthropod Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD90		6	d	40		ug/org	100	74171
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD90		6	d	36		ug/org	100	74171
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD50		6	d	4.9		ug/org	100	74171
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD50		6	d	6.7		ug/org	100	74171
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD90		6	d	33		ug/org	100	74171
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD90		6	d	16		ug/org	100	74171
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD50		6	d	3.3		ug/org	100	74171
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD50		6	d	3.4		ug/org	100	74171
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD90		6	d	21		ug/org	100	74171
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD90		6	d	4.4		ug/org	100	74171
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD50		6	d	1		ug/org	100	74171
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD50		6	d	1.8		ug/org	100	74171
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD90		6	d	8.5		ug/org	100	74171
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD90		6	d	21		ug/org	100	74171
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD50		6	d	5.2		ug/org	100	74171
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD50		6	d	2.2		ug/org	100	74171
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD90		6	d	12		ug/org	100	74171

Table H-11 Arthropod Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	NR-LETH			ht	0.07		%	100	74154
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LC50	NR	1	d	0.34		ug/eu	100	73707
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LC85		1	d	0.57		ug/eu	100	73707
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LC95		1	d	1.17		ug/eu	100	73707
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD50		6	d	0.71		ug/org	96	66869
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD50		6	d	0.523		ug/org	96	66869
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD50		6	d	0.838		ug/org	96	66869
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD50		6	d	0.926		ug/org	96	66869
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD99		6	d	9.76		ug/org	96	66869
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD99		6	d	9.76		ug/org	96	66869
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD99		6	d	32.41		ug/org	96	66869
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	LD99		6	d	17.96		ug/org	96	66869
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	NR-LETH			d	0.5		ug/org	96	66869
Endosulfan	Helicoverpa armigera, Old world bollworm	MOR	MOR	MORT	NR-LETH			d	0.5		ug/org	96	66869
Endosulfan	Heliothis armigera, Bollworm	MOR	MOR	MORT	LD50	6	1	d	25.8		ug/g bdwt	100	103049
Endosulfan	Heliothis armigera, Bollworm	MOR	MOR	MORT	LD50	6	1	d	3.14		ug/g bdwt	100	103049
Endosulfan	Heliothis armigera, Bollworm	MOR	MOR	MORT	LD50		3	d	1.2		ug/org	99.5	88489

Table H-11 Arthropod Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Heliothis virescens, Budworm	MOR	MOR	MORT	LT50		~4.17	d	0.002		ug/eu	100	74124
Endosulfan	Heliothis virescens, Budworm	MOR	MOR	MORT	LD50		3	d	2.33		ug/org	100	96523
Endosulfan	Heliothis virescens, Budworm	MOR	MOR	MORT	LD95		3	d	9.76		ug/org	100	96523
Endosulfan	Heliothis virescens, Budworm	MOR	MOR	MORT	LD50		3	d	2.13		ug/org	100	96523
Endosulfan	Heliothis virescens, Budworm	MOR	MOR	MORT	LD95		3	d	4.38		ug/org	100	96523
Endosulfan	Heliothis virescens, Budworm	MOR	MOR	MORT	LD50		3	d	3.53		ug/org	100	96523
Endosulfan	Heliothis virescens, Budworm	MOR	MOR	MORT	LD95		3	d	21.33		ug/org	100	96523
Endosulfan	Heliothis virescens, Budworm	MOR	MOR	MORT	LD50		3	d	2.35		ug/org	100	96523
Endosulfan	Heliothis virescens, Budworm	MOR	MOR	MORT	LD95		3	d	23.05		ug/org	100	96523
Endosulfan	Heliothis virescens, Budworm	MOR	MOR	MORT	LD50		3	d	3.63		ug/org	100	96523
Endosulfan	Heliothis virescens, Budworm	MOR	MOR	MORT	LD95		3	d	10.13		ug/org	100	96523
Endosulfan	Heliothis virescens, Budworm	MOR	MOR	MORT	LD50		3	d	1.34		ug/org	100	96523
Endosulfan	Heliothis virescens, Budworm	MOR	MOR	MORT	LD95		3	d	6.31		ug/org	100	96523
Endosulfan	Heliothis virescens, Budworm	MOR	MOR	MORT	LD50		3	d	2.72		ug/org	100	96523
Endosulfan	Heliothis virescens, Budworm	MOR	MOR	MORT	LD95		3	d	28.07		ug/org	100	96523
Endosulfan	Henosepilachna sp., Ladybird Beetle	MOR	MOR	MORT	NOAEL		2	d	437.5		L/ha	35	101480
Endosulfan	Henosepilachna sp., Ladybird Beetle	MOR	MOR	MORT	LOAEL		2	d	437.5		L/ha	35	101480

Table H-11 Arthropod Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Hypothenemus hampei, Coffee Borer Beetle	MOR	MOR	MORT	LD50		0.25	d	14.805		ppm	35	63401
Endosulfan	Hypothenemus hampei, Coffee Borer Beetle	MOR	MOR	MORT	LD50		0.25	d	38430		ppm	35	63401
Endosulfan	Hypothenemus hampei, Coffee Borer Beetle	MOR	MOR	MORT	LD50		0.25	d	25.62		ppm	35	63401
Endosulfan	Hypothenemus hampei, Coffee Borer Beetle	MOR	MOR	MORT	LD50		0.25	d	367.5		ppm	35	63401
Endosulfan	Hypothenemus hampei, Coffee Borer Beetle	MOR	MOR	MORT	LD50		0.25	d	14.805		ppm	35	63401
Endosulfan	Hypothenemus hampei, Coffee Borer Beetle	MOR	MOR	MORT	LD50		0.25	d	948.5		ppm	35	63401
Endosulfan	Lacanobia subjuncta, Speckled cutworm moth	MOR	MOR	MORT	LC50		7	d	1.8		ppm	100	82540
Endosulfan	Lacanobia subjuncta, Speckled cutworm moth	MOR	MOR	MORT	LC50		7	d	1.4		ppm	100	82540
Endosulfan	Lacanobia subjuncta, Speckled cutworm moth	MOR	MOR	MORT	LC50		7	d	95.7		ppm	100	82540
Endosulfan	Lancetoppia sp., Mite	MOR	MOR	MORT	NR-LETH			d	0.1155		%	35	50746
Endosulfan	Lancetoppia sp., Mite	MOR	MOR	MORT	NR-LETH			d	0.1155		%	35	50746
Endosulfan	Lancetoppia sp., Mite	MOR	MOR	MORT	NR-LETH	3		d	0.1155		%	35	50746
Endosulfan	Lancetoppia sp., Mite	MOR	MOR	MORT	NR-ZERO	NR-LETH 3	1	d	0.00875	0.875	L/ha	35	58741
Endosulfan	Leptinotarsa decemlineata, Colorado potato beetle	MOR	MOR	MORT	LD50		3	d	4.27		ug/g bdwt	100	52052
Endosulfan	Leptinotarsa decemlineata, Colorado potato beetle	MOR	MOR	MORT	LD95		3	d	9.76		ug/g bdwt	100	52052
Endosulfan	Leptinotarsa decemlineata, Colorado potato beetle	MOR	MOR	MORT	NR-LETH			d	0.07		kg/ha	100	52052
Endosulfan	Leptinotarsa decemlineata, Colorado potato beetle	MOR	MOR	MORT	LC50	1	0.75	d	0.0011		% w/v	96	64599

Table H-11 Arthropod Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Leptinotarsa decemlineata, Colorado potato beetle	MOR	MOR	MORT	LC50		0.75	d	0.0006		% w/v	96	64599
Endosulfan	Leptinotarsa decemlineata, Colorado potato beetle	MOR	MOR	MORT	LC50		0.75	d	0.0008		% w/v	96	64599
Endosulfan	Leptinotarsa decemlineata, Colorado potato beetle	MOR	MOR	MORT	LC50		0.75	d	0.0007		% w/v	96	64599
Endosulfan	Leptinotarsa decemlineata, Colorado potato beetle	MOR	MOR	MORT	LC50		0.75	d	0.0022		% w/v	96	64599
Endosulfan	Leptinotarsa decemlineata, Colorado potato beetle	MOR	MOR	MORT	LC50		0.75	d	0.0065		% w/v	96	64599
Endosulfan	Leptinotarsa decemlineata, Colorado potato beetle	MOR	MOR	MORT	LC50		0.75	d	0.0167		% w/v	96	64599
Endosulfan	Leptinotarsa decemlineata, Colorado potato beetle	MOR	MOR	MORT	LC50		0.75	d	0.013		% w/v	96	64599
Endosulfan	Leptinotarsa decemlineata, Colorado potato beetle	MOR	MOR	MORT	LC50		0.75	d	0.0055		% w/v	96	64599
Endosulfan	Leptinotarsa decemlineata, Colorado potato beetle	MOR	MOR	MORT	LC50		0.75	d	0.015		% w/v	96	64599
Endosulfan	Leptinotarsa decemlineata, Colorado potato beetle	MOR	MOR	MORT	LC50		0.75	d	0.016		% w/v	96	64599
Endosulfan	Leptinotarsa decemlineata, Colorado potato beetle	MOR	MOR	MORT	LC50		0.75	d	0.026		% w/v	96	64599
Endosulfan	Leptinotarsa decemlineata, Colorado potato beetle	MOR	MOR	MORT	LC50		0.75	d	1		% w/v	96	64599
Endosulfan	Lindorus lophanthae, Black Lady Beetle	MOR	MOR	MORT	LT50		>4	d	0.0477		AI % w/w	25	98221
Endosulfan	Lindorus lophanthae, Black Lady Beetle	MOR	MOR	MORT	LT50		>4	d	0.477		AI % w/w	25	98221
Endosulfan	Lipaphis erysimi, Turnip aphid	MOR	MOR	MORT	NR-LETH			d	0.0245		%	35	101406
Endosulfan	Lipaphis erysimi, Turnip aphid	MOR	MOR	MORT	NR-LETH			d	525		ai g/ha	100	91432

Table H-11 Arthropod Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Lipaphis erysimi, Turnip aphid	MOR	MOR	MORT	LT50		4.02	d	525		ai g/ha	100	91432
Endosulfan	Loxostege sticticalis, Beet Webworm	MOR	MOR	MORT	LD50		1	d	263		ug/g bdwt	100	100430
Endosulfan	Loxostege sticticalis, Beet Webworm	MOR	MOR	MORT	LD50		1	d	0.15		ug/g bdwt	100	100430
Endosulfan	Malacosoma indica, Forest Tent Caterpillar	MOR	MOR	MORT	LOAEL		3	d	0.025		AI %	100	62382
Endosulfan	Malacosoma indica, Forest Tent Caterpillar	MOR	MOR	MORT	LOAEL		3	d	0.025		AI %	100	62382
Endosulfan	Malacosoma indica, Forest Tent Caterpillar	MOR	MOR	MORT	NR-LETH			d	0.025		AI %	100	62382
Endosulfan	Malacosoma indica, Forest Tent Caterpillar	MOR	MOR	MORT	NR-LETH			d	0.025		AI %	100	62382
Endosulfan	Malacosoma indica, Forest Tent Caterpillar	MOR	MOR	MORT	LOAEL	3	3	d	0.025		AI %	100	62382
Endosulfan	Malacosoma indica, Forest Tent Caterpillar	MOR	MOR	MORT	LOAEL	3	3	d	0.025		AI %	100	62382
Endosulfan	Malacosoma indica, Forest Tent Caterpillar	MOR	MOR	MORT	LOAEL		3	d	0.02		AI %	100	62382
Endosulfan	Malacosoma indica, Forest Tent Caterpillar	MOR	MOR	MORT	LOAEL		3	d	0.02		AI %	100	62382
Endosulfan	Malacosoma indica, Forest Tent Caterpillar	MOR	MOR	MORT	NR-LETH			d	0.02		AI %	100	62382
Endosulfan	Mamestra configurata, Bertha Armyworm	MOR	MOR	MORT	LOEL	3	0.75	d	0.1		% w/v	90 to 99	49989
Endosulfan	Metaphycus luteolus, Brown Scale Parasite	MOR	MOR	MORT	LT50		>4	d	0.0477		AI % w/w	25	98221
Endosulfan	Metaphycus luteolus, Brown Scale Parasite	MOR	MOR	MORT	LT50		>4	d	0.477		AI % w/w	25	98221
Endosulfan	Microplitis croceipes, Braconid Parasitoid Wasp	MOR	MOR	MORT	NR-LETH			d	1.05		AI kg/ha	100	93416
Endosulfan	Microplitis croceipes, Braconid Parasitoid Wasp	MOR	MOR	MORT	NR-LETH	1		d	1.05		AI kg/ha	100	93416

Table H-11 Arthropod Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Nephus sp., Ladybird Beetle	MOR	MOR	MORT	LC50		2	d	18.67		ml/100 L	100	97758
Endosulfan	Nephus sp., Ladybird Beetle	MOR	MOR	MORT	LC90		2	d	118.61		ml/100 L	100	97758
Endosulfan	Nilaparvata lugens, Brown Planthopper	MOR	MOR	MORT	LC50		2	d	14.4		ppm	100	20421
Endosulfan	Nilaparvata lugens, Brown Planthopper	MOR	MOR	MORT	LC50		2	d	0.675		ppm	100	20421
Endosulfan	Nisotra sp., Flea Beetle	MOR	MOR	MORT	LC50		1	d	0.0729		%	97	104298
Endosulfan	Nomia melanderi, Alkali bee	MOR	MOR	MORT	NR-LETH			d	1		lb/acre	100	57089
Endosulfan	Orgilus lepidus, Braconid Wasp	MOR	MOR	MORT	LC50		1	d	0.000009		Al g/ml	100	73144
Endosulfan	Perillus bioculatus, Twospotted Stink Bug	MOR	MOR	MORT	LC50	2	2	d	0.0069		ai mg/ml	3	89912
Endosulfan	Perillus bioculatus, Twospotted Stink Bug	MOR	MOR	MORT	LC90		2	d	0.0201		ai mg/ml	3	89912
Endosulfan	Perillus bioculatus, Twospotted Stink Bug	MOR	MOR	HTCH	NOAEL		9	d	0.0093		ml/100m l	3	89912
Endosulfan	Perillus bioculatus, Twospotted Stink Bug	MOR	MOR	MORT	NR-LETH			d	0.0093		ml/100m l	3	89912
Endosulfan	Perillus bioculatus, Twospotted Stink Bug	MOR	MOR	MORT	LOAEL	2	2	d	0.0093		ml/100m l	3	89912
Endosulfan	Phthorimaea operculella, Potato Tuberworm	MOR	MOR	MORT	NOAEL	LOAEL	1	d	58.8	1470	ppm	100	99807
Endosulfan	Phthorimaea operculella, Potato Tuberworm	MOR	MOR	MORT	NR-LETH			d	1470		ppm	100	99807
Endosulfan	Phthorimaea operculella, Potato Tuberworm	MOR	MOR	MORT	LC50		1	d	0.000075		Al g/ml	100	73144
Endosulfan	Phthorimaea operculella, Potato Tuberworm	MOR	MOR	MORT	LC50	1	1	d	0.000002		Al g/ml	100	73144
Endosulfan	Phyllonorycter blancardella, NR	MOR	MOR	MORT	LOAEL		10	d	231		Al g/378 L	100	74112

Table H-11 Arthropod Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Phyllonorycter crataegella, Apple Blotch Leafminer	MOR	MOR	MORT	LC50		0.5	d	0.2744		ug/cm2	98 to 99	104196
Endosulfan	Phyllotreta cruciferae, Crucifer flea beetle	MOR	MOR	MORT	LD50		2	d	0.16		Al kg/ha	100	89123
Endosulfan	Phyllotreta cruciferae, Crucifer flea beetle	MOR	MOR	MORT	LD95		2	d	0.36		Al kg/ha	100	89123
Endosulfan	Plutella xylostella, Diamondback moth	MOR	MOR	MORT	LC50		2	d	80.7		ug/g	100	103261
Endosulfan	Plutella xylostella, Diamondback moth	MOR	MOR	MORT	LC50		2	d	91		ug/g	100	103261
Endosulfan	Podagrica sp., Flea Beetle	MOR	MOR	MORT	LD50		1	d	25.26		ug/g	100	82824
Endosulfan	Podagrica sp., Flea Beetle	MOR	MOR	MORT	LC50		1	d	95		ppm	100	82824
Endosulfan	Popillia japonica, Japanese beetle	MOR	MOR	MORT	NOAEL		1	d	1.25		Al lb/acre	100	87898
Endosulfan	Popillia japonica, Japanese beetle	MOR	MOR	MORT	LOAEL		1	d	1.25		Al lb/acre	50	87899
Endosulfan	Popillia japonica, Japanese beetle	MOR	MOR	MORT	LOAEL		1	d	1.25		Al lb/acre	50	87899
Endosulfan	Rivula sp., Grey Semilooper	MOR	MOR	MORT	LOAEL		3	d	0.07		%	100	89146
Endosulfan	Scheloribates sp., Mite	MOR	MOR	MORT	NR-ZERO			d	0.00875		L/ha	35	58741
Endosulfan	Spilosoma obliqua, Bihar Hairy Caterpillar	MOR	MOR	MORT	NR-LETH			d	525		ai g/ha	100	91432
Endosulfan	Spilosoma obliqua, Bihar Hairy Caterpillar	MOR	MOR	MORT	LT50	1	23.2	d	525		ai g/ha	100	91432
Endosulfan	Spodoptera exigua, Beet Armyworm	MOR	MOR	MORT	LD50	1	3	d	0.0089		ug/org	100	81618
Endosulfan	Spodoptera litura, Common cutworm	MOR	MOR	MORT	LD30		1	d	1.96		mg	94.8	90664
Endosulfan	Sympiesis marylandensis, Parasitic Wasp	MOR	MOR	MORT	LC50		0.5	d	0.1764		ug/cm2	98 to 99	104196

Table H-11 Arthropod Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Tribolium castaneum, Rust-Red Flour Beetle	MOR	MOR	MORT	LC50		1	d	0.15978		%	100	66636
Endosulfan	Tribolium castaneum, Rust-Red Flour Beetle	MOR	MOR	MORT	LC50		1	d	0.19067		%	100	66636
Endosulfan	Trichogramma brasiliensis, Parasitic Wasp	MOR	MOR	MORT	NR-LETH			d	0.25		AI %	35	104339
Endosulfan	Trichogramma cordubensis, Wasp	MOR	MOR	MORT	LOAEL	1	0.25	d	0.2275		%	35	69714
Endosulfan	Trichogramma cordubensis, Wasp	MOR	MOR	MORT	LOAEL		0.25	d	0.2275		%	35	69714
Endosulfan	Trichogramma cordubensis, Wasp	MOR	MOR	MORT	NR-LETH			d	0.2275		%	35	69714
Endosulfan	Trichogramma cordubensis, Wasp	MOR	MOR	MORT	NR-LETH	0.25		d	0.2275		%	35	69714
Endosulfan	Trichogramma platneri, Parasitic wasp	MOR	MOR	MORT	NR-LETH	1		d	450		ppm	100	63713
Endosulfan	Trichogramma platneri, Parasitic wasp	MOR	MOR	MORT	NOAEL	2	2	d	225		ppm	100	63713
Endosulfan	Trichogramma platneri, Parasitic wasp	MOR	MOR	MORT	LOAEL		2	d	450		ppm	100	63713
Endosulfan	Trichogramma platneri, Parasitic wasp	MOR	MOR	MORT	LOAEL		2	d	450		ppm	100	63713
Endosulfan	Trichogramma pretiosum, Parasitic wasp	MOR	MOR	MORT	LOAEL		1	d	0.56		AI kg/ha	100	37276
Endosulfan	Trichogramma pretiosum, Parasitic wasp	MOR	MOR	MORT	LOAEL		1	d	0.56		AI kg/ha	100	37276
Endosulfan	Trichogramma pretiosum, Parasitic wasp	MOR	MOR	MORT	LOAEL		1	d	0.56		AI kg/ha	100	37276
Endosulfan	Trichoplusia ni, Cabbage looper	MOR	MOR	MORT	LC50		2	d	0.078		%	100	82480
Endosulfan	Tricliona sp., Red Beetle	MOR	MOR	MORT	LC50		1	d	4.0845		ppm	100	90654
Endosulfan	Tricliona sp., Red Beetle	MOR	MOR	MORT	LC90		1	d	9.7832		ppm	100	90654

Table H-11 Arthropod Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Triclicona sp., Red Beetle	MOR	MOR	MORT	LC50		2	d	14.9005		ppm	100	90654
Endosulfan	Triclicona sp., Red Beetle	MOR	MOR	MORT	LC90		2	d	14.9005		ppm	100	90654
Endosulfan	Trigona spinipes, Bee	MOR	MOR	MORT	LD50		1	d	0.2097		ug/org	100	51755
Endosulfan	Trioxys complanatus, Parasitic Wasp	MOR	MOR	MORT	NOAEL		1	d	350		ai g/ha	35	36687
Endosulfan	Trioxys complanatus, Parasitic Wasp	MOR	MOR	MORT	NOAEL		>1	d	350		ai g/ha	35	36687
Endosulfan	Trioxys pallidus, Parasitic Wasp	MOR	MOR	MORT	NR-ZERO			d	1.68		Al kg/3741 L/ha	50	68131
Endosulfan	Venturia canescens, Parasitic Wasp	MOR	MOR	MORT	LD50	0.17	<=2	d	47		ug/g org	100	70625
Endosulfan	Xenylla sp, Springtail	MOR	MOR	MORT	NR-LETH			d	0.1155		%	35	50746
Endosulfan	Trichogramma pretiosum, Parasitic wasp	PHY	IMM	PRNF	LOAEL	3	1	d	0.56		Al kg/ha	100	37276
Endosulfan	Acalymma vittatum, Striped Cucumber Beetle	POP	POP	CNTL	NOAEL		32	d	0.75		Al lb/acre	100	88802
Endosulfan	Acalymma vittatum, Striped Cucumber Beetle	POP	POP	ABND	LOAEL		25	d	1		Al lb/acre	100	104289
Endosulfan	Acalymma vittatum, Striped Cucumber Beetle	POP	POP	CNTL	LOAEL		41	d	1		Al lb/acre	3	104463
Endosulfan	Acalymma vittatum, Striped Cucumber Beetle	POP	POP	ABND	NOAEL		13	d	1		qt/acre	100	105074
Endosulfan	Acarapis externus, External Bee Mite	POP	POP	ABND	LOAEL		30	d	20		ppm	35	39706
Endosulfan	Acarapis externus, External Bee Mite	POP	POP	ABND	LOAEL		30	d	20		ppm	35	39706
Endosulfan	Acarapis externus, External Bee Mite	POP	POP	ABND	LOAEL		30	d	20		ppm	35	39706
Endosulfan	Acarapis externus, External Bee Mite	POP	POP	ABND	LOAEL		17	d	20		ppm	35	39706

Table H-11 Arthropod Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Acarapis externus, External Bee Mite	POP	POP	ABND	LOAEL		17	d	20		ppm	35	39706
Endosulfan	Acarina Acarina, Chigger, Tick, Mite subclass	POP	POP	CNTL	LOAEL		60	d	1		ml/L	100	72297
Endosulfan	Achaearanea veruculata, Tangle Web Spider	POP	POP	ABND	NOAEL		>=7	d	735		ai g/ha	100	77182
Endosulfan	Achaearanea veruculata, Tangle Web Spider	POP	POP	ABND	NOAEL		>=7	d	735		ai g/ha	100	77182
Endosulfan	Achaearanea veruculata, Tangle Web Spider	POP	POP	ABND	LOAEL		>=7	d	735		ai g/ha	100	77182
Endosulfan	Acrosternum hilare, Stink bug	POP	POP	ABND	NOAEL		>30	d	1		Al lb/acre	100	82732
Endosulfan	Acrosternum hilare, Stink bug	POP	POP	ABND	NOAEL		>30	d	1		Al lb/acre	100	82732
Endosulfan	Agrotis ipsilon, Cutworm	POP	POP	ABND	LOAEL		2	d	4.2		ai kg/ha	35	89316
Endosulfan	Agrotis ipsilon, Cutworm	POP	POP	CNTL	LOAEL		7	d	0.1		%	100	91445
Endosulfan	Agrotis ipsilon, Cutworm	POP	POP	CNTL	LOAEL		7	d	0.1		%	100	91445
Endosulfan	Agrotis ipsilon, Cutworm	POP	POP	CNTL	LOAEL		7	d	0.1		%	100	91445
Endosulfan	Amblyseius victoriensis, Predatory mite	POP	POP	ABND	LOAEL		2	d	66.5		ml/100 L	35	89784
Endosulfan	Amrasca biguttula, Jassid	POP	POP	ABND	LOAEL		NR	stg	875		ai g/ha	100	92630
Endosulfan	Amrasca sp., Leaf Hopper	POP	POP	ABND	LOAEL		15	d	0.05		%	100	89083
Endosulfan	Anasa tristis, Squash Bug	POP	POP	CNTL	NOAEL		32	d	0.75		Al lb/acre	100	88802
Endosulfan	Anthonomus grandis, Boll weevil	POP	POP	ABND	LOAEL			gs	0.56		ai kg/ha	100	92637
Endosulfan	Anthonomus grandis, Boll weevil	POP	POP	ABND	NOAEL			gs	0.56		ai kg/ha	100	92637

Table H-11 Arthropod Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Antigastra catalaunalis, Capsule Borer	POP	POP	ABND	NOAEL		<=15	d	0.8		kg/ha	4	91627
Endosulfan	Antigastra catalaunalis, Capsule Borer	POP	POP	ABND	LOAEL		<=15	d	0.07		%	100	91627
Endosulfan	Antigastra catalaunalis, Capsule Borer	POP	POP	ABND	NOAEL		30	d	0.07		%	100	91627
Endosulfan	Antigastra catalaunalis, Capsule Borer	POP	POP	ABND	NOAEL		15	d	0.07		%	100	91627
Endosulfan	Antigastra catalaunalis, Capsule Borer	POP	POP	ABND	NOAEL		<1	d	0.07		%	100	91627
Endosulfan	Antigastra catalaunalis, Capsule Borer	POP	POP	ABND	NOAEL		30	d	0.07		%	100	91627
Endosulfan	Antigastra catalaunalis, Capsule Borer	POP	POP	ABND	NOAEL		30	d	0.07		%	100	91627
Endosulfan	Antigastra catalaunalis, Capsule Borer	POP	POP	ABND	NOAEL		15	d	0.07		%	100	91627
Endosulfan	Antigastra catalaunalis, Capsule Borer	POP	POP	ABND	NOAEL		30	d	0.07		%	100	91627
Endosulfan	Antigastra catalaunalis, Capsule Borer	POP	POP	ABND	NOAEL		40	d	0.07		%	100	91627
Endosulfan	Aphis craccivora, Aphid	POP	POP	ABND	LOAEL		29	d	0.025		%	100	89083
Endosulfan	Aphis craccivora, Aphid	POP	POP	ABND	LOAEL		29	d	0.025		%	100	89083
Endosulfan	Aphis craccivora, Aphid	POP	POP	ABND	LOAEL		15	d	0.05		%	100	89083
Endosulfan	Apis florea, Dwarf Honey Bee	POP	POP	ABND	NOAEL		7	d	0.07		%	100	89180
Endosulfan	Aproaerema modicella, Groundnut Leafminer	POP	POP	CNTL	LOAEL		1	d	25		kg/ha	100	91578
Endosulfan	Aproaerema modicella, Groundnut Leafminer	POP	POP	CNTL	LOAEL		1	d	25		kg/ha	100	91578
Endosulfan	Asphondylia sesami, Gall Fly	POP	POP	ABND	NOAEL		<=15	d	0.8		kg/ha	4	91627

Table H-11 Arthropod Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Asphondylia sesami, Gall Fly	POP	POP	ABND	LOAEL		<=15	d	0.07		%	100	91627
Endosulfan	Asphondylia sesami, Gall Fly	POP	POP	ABND	LOAEL		40	d	0.07		%	100	91627
Endosulfan	Asphondylia sesami, Gall Fly	POP	POP	ABND	LOAEL		30	d	0.07		%	100	91627
Endosulfan	Asphondylia sesami, Gall Fly	POP	POP	ABND	LOAEL		15	d	0.07		%	100	91627
Endosulfan	Asphondylia sesami, Gall Fly	POP	POP	ABND	LOAEL		30	d	0.07		%	100	91627
Endosulfan	Asphondylia sesami, Gall Fly	POP	POP	ABND	LOAEL		30	d	0.07		%	100	91627
Endosulfan	Asphondylia sesami, Gall Fly	POP	POP	ABND	LOAEL		<1	d	0.07		%	100	91627
Endosulfan	Asphondylia sesami, Gall Fly	POP	POP	ABND	LOAEL		15	d	0.07		%	100	91627
Endosulfan	Asphondylia sesami, Gall Fly	POP	POP	ABND	LOAEL		30	d	0.07		%	100	91627
Endosulfan	Bemisia tabaci, Sweetpotato whitefly	POP	POP	CNTL	LOAEL		~120	d	1		Al lb/acre	100	98097
Endosulfan	Bemisia tabaci, Sweetpotato whitefly	POP	POP	CNTL	LOAEL		1	d	1		Al lb/acre	3	83300
Endosulfan	Bemisia tabaci, Sweetpotato whitefly	POP	POP	CNTL	NOAEL			gs	0.05		%	100	82101
Endosulfan	Bemisia tabaci, Sweetpotato whitefly	POP	POP	CNTL	LOAEL			gs	0.05		%	100	82101
Endosulfan	Blastobasis sp., Litchi Nut Borer	POP	POP	ABND	LOAEL			hv	0.2		%	100	93083
Endosulfan	Blastobasis sp., Litchi Nut Borer	POP	POP	ABND	LOAEL			hv	0.2		%	100	93083
Endosulfan	Bruchophagus roddi, Alfalfa Seed Chalcid	POP	POP	ABND	NOAEL		NA	hv	2		Al lb/acre	100	50972
Endosulfan	Calocoris angustatus, Sorghum Head Bug	POP	POP	CNTL	LOAEL		1	d	250		ai g/ha	100	92941

Table H-11 Arthropod Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Calocoris angustatus, Sorghum Head Bug	POP	POP	CNTL	LOAEL		1	d	250		ai g/ha	100	92941
Endosulfan	Calocoris angustatus, Sorghum Head Bug	POP	POP	ABND	LOAEL		1	d	250		Al g/ha	100	104816
Endosulfan	Campylomma liebknechti, Dimpling Bug	POP	POP	ABND	LOAEL		>=7	d	735		ai g/ha	100	77182
Endosulfan	Campylomma liebknechti, Dimpling Bug	POP	POP	ABND	LOAEL		>=7	d	367.5		ai g/ha	100	77182
Endosulfan	Campylomma liebknechti, Dimpling Bug	POP	POP	ABND	LOAEL		>=7	d	735		ai g/ha	100	77182
Endosulfan	Catolaccus grandis, Ectoparasitoid Wasp	POP	POP	ABND	NOAEL		1	d	0.42		ai kg/ha	100	58583
Endosulfan	Catolaccus grandis, Ectoparasitoid Wasp	POP	POP	ABND	NOAEL		1	d	0.42		ai kg/ha	100	58583
Endosulfan	Ceutorhynchus assimilis, Cabbage seedpod weevil	POP	POP	ABND	LOAEL		2	d	1.12		Al kg/ha	100	63601
Endosulfan	Ceutorhynchus assimilis, Cabbage seedpod weevil	POP	POP	ABND	LOAEL		~30	d	1.12		Al kg/ha	100	63601
Endosulfan	Ceutorhynchus assimilis, Cabbage seedpod weevil	POP	POP	ABND	LOAEL		~30	d	1.12		Al kg/ha	100	63601
Endosulfan	Ceutorhynchus assimilis, Cabbage seedpod weevil	POP	POP	ABND	LOAEL		>60	d	1.12		Al g/ha	100	63601
Endosulfan	Ceutorhynchus assimilis, Cabbage seedpod weevil	POP	POP	ABND	LOAEL		>60	d	1.12		Al g/ha	100	63601
Endosulfan	Ceutorhynchus assimilis, Cabbage seedpod weevil	POP	POP	ABND	LOAEL		>60	d	1.12		Al g/ha	100	63601
Endosulfan	Ceutorhynchus assimilis, Cabbage seedpod weevil	POP	POP	ABND	LOAEL		>60	d	1.12		Al g/ha	100	63601
Endosulfan	Ceutorhynchus assimilis, Cabbage seedpod weevil	POP	POP	ABND	LOAEL		<60	d	1.12		Al g/ha	100	63601
Endosulfan	Ceutorhynchus assimilis, Cabbage seedpod weevil	POP	POP	ABND	LOAEL		>60	d	1.12		Al g/ha	100	63601
Endosulfan	Ceutorhynchus assimilis, Cabbage seedpod weevil	POP	POP	ABND	LOAEL		2	d	1		Al lb/acre	100	73097

Table H-11 Arthropod Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Ceutorhynchus assimilis, Cabbage seedpod weevil	POP	POP	ABND	LOAEL		3	d	1		Al lb/acre	100	73097
Endosulfan	Ceutorhynchus assimilis, Cabbage seedpod weevil	POP	POP	ABND	LOAEL		2	d	1		Al lb/acre	100	73097
Endosulfan	Chaetocnema sp., Flea Beetle	POP	POP	ABND	LOAEL		2	d	250		Al g/ha	35	89317
Endosulfan	Chauliops fallax, True Bug	POP	POP	ABND	LOAEL		29	d	0.025		%	100	89083
Endosulfan	Chauliops fallax, True Bug	POP	POP	ABND	LOAEL		15	d	0.05		%	100	89083
Endosulfan	Chilo partellus, Sorghum stem borer	POP	POP	CNTL	LOAEL		NA	hv	0.05		%	100	92547
Endosulfan	Chilo partellus, Sorghum stem borer	POP	POP	CNTL	LOAEL		35	d	0.04		Al g/ha	100	92821
Endosulfan	Chilo partellus, Sorghum stem borer	POP	POP	ABND	LOAEL		35 TO 45	d	0.05		%	100	103896
Endosulfan	Chilo partellus, Sorghum stem borer	POP	POP	ABND	LOAEL		35 TO 45	d	0.05		%	100	103896
Endosulfan	Chilo partellus, Sorghum stem borer	POP	POP	ABND	LOAEL		35 TO 45	d	0.05		%	100	103896
Endosulfan	Chilo partellus, Sorghum stem borer	POP	POP	ABND	LOAEL		35 TO 45	d	0.05		%	100	103896
Endosulfan	Chilo partellus, Sorghum stem borer	POP	POP	ABND	LOAEL		35 TO 45	d	0.05		%	100	103896
Endosulfan	Chilo partellus, Sorghum stem borer	POP	POP	ABND	LOAEL		35 TO 45	d	0.05		%	100	103896
Endosulfan	Chilo partellus, Sorghum stem borer	POP	POP	CNTL	LOAEL		NA	hv	0.4		kg/ha	4	104580
Endosulfan	Chilo partellus, Sorghum stem borer	POP	POP	CNTL	LOAEL		NA	hv	0.4		kg/ha	4	104580
Endosulfan	Chromatomyia horticola, Pea Leafminer	POP	POP	ABND	NOAEL			hv	0.07		%	100	90419
Endosulfan	Cnaphalocrocis medinalis, Rice leaf folder moth	POP	POP	CNTL	LOAEL		30	d	0.5		Al kg/ha	35	91647

Table H-11 Arthropod Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Cochylis hospes, Banded sunflower moth	POP	POP	CNTL	LOAEL		na	hv	0.84		ai kg/ha	100	79761
Endosulfan	Contarinia sorghicola, NR	POP	POP	ABND	LOAEL		1	d	0.05		%	100	92547
Endosulfan	Contarinia sorghicola, NR	POP	POP	ABND	NOAEL		NR	em	250		AI g/ha	100	104816
Endosulfan	Cylas formicarius, Sweet potato weevil	POP	POP	CNTL	LOAEL			hv	1250		AI g/ha	100	89011
Endosulfan	Diabrotica undecimpunctata, Southern corn rootworm	POP	POP	CNTL	NOAEL		32	d	0.75		AI lb/acre	100	88802
Endosulfan	Diabrotica undecimpunctata, Southern corn rootworm	POP	POP	ABND	LOAEL		16	d	1		AI lb/acre	100	104289
Endosulfan	Diabrotica undecimpunctata, Southern corn rootworm	POP	POP	CNTL	LOAEL		41	d	1		AI lb/acre	3	104463
Endosulfan	Diacrisia obliqua, Bihar Hairy Moth	POP	POP	ABND	LOAEL		7	d	0.025		AI %	100	40255
Endosulfan	Dichocrocis punctiferalis, Castor Pod Borer	POP	POP	ABND	LOAEL		1	gs	4		%	100	91434
Endosulfan	Dorylus orientalis, Red Ant	POP	POP	ABND	LOAEL			hv	1		AI kg/ha	4	101789
Endosulfan	Dorylus orientalis, Red Ant	POP	POP	ABND	LOAEL			hv	1		AI kg/ha	4	101789
Endosulfan	Dorylus orientalis, Red Ant	POP	POP	ABND	LOAEL			hv	1		AI kg/ha	4	101789
Endosulfan	Earias sp., Spiny Bollworm	POP	POP	ABND	LOAEL		NA	hv	0.06		AI %	100	100289
Endosulfan	Earias vittella, Rough Bollworm	POP	POP	ABND	LOAEL		30	d	0.06		%	100	88983
Endosulfan	Earias vittella, Rough Bollworm	POP	POP	ABND	LOAEL		30	d	0.06		%	100	88983
Endosulfan	Earias vittella, Rough Bollworm	POP	POP	ABND	LOAEL		30	d	0.06		%	100	88983
Endosulfan	Empoasca fabae, Potato leafhopper	POP	POP	CNTL	NOAEL		<60	d	0.415		kg/ha	100	79792

Table H-11 Arthropod Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Empoasca fabae, Potato leafhopper	POP	POP	CNTL	LOAEL		<60	d	0.415		kg/ha	100	79768
Endosulfan	Epilachna ocellata, Hadda Beetle	POP	POP	ABND	LOAEL		29	d	0.025		%	100	89083
Endosulfan	Epilachna ocellata, Hadda Beetle	POP	POP	ABND	LOAEL		15	d	0.05		%	100	89083
Endosulfan	Etiella zinckenella, Limabean Pod Borer	POP	POP	ABND	NOAEL			hv	0.07		%	100	90419
Endosulfan	Evergestis forficalis, Garden Pebble Moth	POP	POP	ABND	LOAEL		3	d	0.05		%	100	89400
Endosulfan	Evergestis forficalis, Garden Pebble Moth	POP	POP	ABND	LOAEL		3	d	0.05		%	100	89400
Endosulfan	Frankliniella fusca, Tobacco thrip	POP	POP	ABND	LOAEL		>30	d	1		Al lb/acre	100	82732
Endosulfan	Frankliniella fusca, Tobacco thrip	POP	POP	ABND	LOAEL		>30	d	1		Al lb/acre	100	82732
Endosulfan	Frankliniella sp., Common Thrip	POP	POP	ABND	LOAEL		51	d	1		Al lb/acre	100	97923
Endosulfan	Helicoverpa armigera, Old world bollworm	POP	POP	ABND	LOAEL			ma	0.07		%	100	75773
Endosulfan	Helicoverpa armigera, Old world bollworm	POP	POP	ABND	LOAEL			ma	0.07		%	100	75773
Endosulfan	Helicoverpa armigera, Old world bollworm	POP	POP	ABND	LOAEL			ma	0.07		%	100	75773
Endosulfan	Helicoverpa armigera, Old world bollworm	POP	POP	ABND	LOAEL			ma	0.07		%	100	75773
Endosulfan	Helicoverpa armigera, Old world bollworm	POP	POP	ABND	LOAEL		89	d	700		ai g/ha	100	100338
Endosulfan	Helicoverpa armigera, Old world bollworm	POP	POP	ABND	LOAEL		89	d	700		ai g/ha	100	100338
Endosulfan	Helicoverpa armigera, Old world bollworm	POP	POP	ABND	LOAEL		NR	fr	875		ai g/ha	100	92630
Endosulfan	Helicoverpa armigera, Old world bollworm	POP	POP	ABND	LOAEL		NR	fr	875		ai g/ha	100	92630

Table H-11 Arthropod Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Helicoverpa armigera, Old world bollworm	POP	POP	ABND	LOAEL		NR	stg	875		ai g/ha	100	92630
Endosulfan	Helicoverpa armigera, Old world bollworm	POP	POP	CNTL	LOAEL		NA	hv	420		AI g/ha	100	92940
Endosulfan	Helicoverpa zea, Corn earworm	POP	POP	ABND	LOAEL		>30	d	1		AI lb/acre	100	82732
Endosulfan	Helicoverpa zea, Corn earworm	POP	POP	ABND	LOAEL		>30	d	1		AI lb/acre	100	82732
Endosulfan	Helicoverpa zea, Corn earworm	POP	POP	ABND	LOAEL		~30	d	1.12		ai kg/ha	100	74169
Endosulfan	Helicoverpa zea, Corn earworm	POP	POP	ABND	LOAEL		~30	d	1.12		ai kg/ha	100	74169
Endosulfan	Helicoverpa zea, Corn earworm	POP	POP	ABND	LOAEL		~30	d	1.12		ai kg/ha	100	74169
Endosulfan	Helicoverpa zea, Corn earworm	POP	POP	ABND	LOAEL		~30	d	1.12		ai kg/ha	100	74169
Endosulfan	Helicoverpa zea, Corn earworm	POP	POP	ABND	NOAEL		~30	d	1.12		ai kg/ha	100	74169
Endosulfan	Helicoverpa zea, Corn earworm	POP	POP	CNTL	LOAEL		4	d	0.75		AI lb/acre	3	92325
Endosulfan	Heliothis armigera, Bollworm	POP	POP	CNTL	NOAEL		100	d	0.4		AI kg/ha	35	54251
Endosulfan	Heliothis armigera, Bollworm	POP	POP	ABND	LOAEL		na	hv	0.07		AI %	100	89154
Endosulfan	Heliothis armigera, Bollworm	POP	POP	ABND	LOAEL		na	hv	0.07		AI %	100	89154
Endosulfan	Heliothis armigera, Bollworm	POP	POP	ABND	LOAEL		na	hv	0.07		AI %	100	89154
Endosulfan	Heliothis armigera, Bollworm	POP	POP	ABND	LOAEL		NA	hv	0.06		AI %	100	100289
Endosulfan	Heliothis armigera, Bollworm	POP	POP	CNTL	LOAEL		3	d	0.05		%	100	104581

Table H-11 Arthropod Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Heliothis virescens, Budworm	POP	POP	CNTL	LOAEL		4	d	0.75		Al lb/acre	3	92325
Endosulfan	Henosepilachna virgintioctopunctata, Twentysix-spotted Potato Ladybird Beetle	POP	POP	CNTL	LOAEL		3	d	0.0245		%	35	89595
Endosulfan	Holotrichia consanguinea, Beetle	POP	POP	ABND	LOAEL		NA	hv	2.5		ai kg/ha	10	79943
Endosulfan	Holotrichia consanguinea, Beetle	POP	POP	ABND	LOAEL		30	d	1		kg/ha	4	80101
Endosulfan	Holotrichia consanguinea, Beetle	POP	POP	ABND	LOAEL		20	d	1		kg/ha	4	80101
Endosulfan	Holotrichia consanguinea, Beetle	POP	POP	ABND	LOAEL		NA	hv	2.5		ai kg/ha	10	80106
Endosulfan	Invertebrates Invertebrates, NR	POP	POP	ABND	LOAEL		3	d	0.1155		%	35	50746
Endosulfan	Keiferia lycopersicella, Tomato pinworm	POP	POP	ABND	NOAEL		>30	d	1		Al lb/acre	100	82732
Endosulfan	Keiferia lycopersicella, Tomato pinworm	POP	POP	ABND	NOAEL		>30	d	1		Al lb/acre	100	82732
Endosulfan	Leptinotarsa decemlineata, Colorado potato beetle	POP	POP	CNTL	LOAEL		<60	d	0.415		kg/ha	100	79792
Endosulfan	Leptinotarsa decemlineata, Colorado potato beetle	POP	POP	CNTL	LOAEL		<60	d	0.415		kg/ha	100	79768
Endosulfan	Leptinotarsa decemlineata, Colorado potato beetle	POP	POP	ABND	LOAEL		3	d	1		Al lb/acre	50	88293
Endosulfan	Leptinotarsa decemlineata, Colorado potato beetle	POP	POP	CNTL	LOAEL		21	d	0.84		ai kg/ha	100	78878
Endosulfan	Leptinotarsa decemlineata, Colorado potato beetle	POP	POP	ABND	LOAEL		11	d	0.75		Al lb/acre	100	88871
Endosulfan	Leptinotarsa decemlineata, Colorado potato beetle	POP	POP	ABND	LOAEL		10	d	0.84		ai kg/ha	100	79341
Endosulfan	Leptinotarsa decemlineata, Colorado potato beetle	POP	POP	ABND	LOAEL		10	d	1		Al lb/acre	50	88111

Table H-11 Arthropod Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Leptinotarsa decemlineata, Colorado potato beetle	POP	POP	CNTL	LOAEL		3	d	1		Al lb/acre	50	88281
Endosulfan	Leptocorisa acuta, Paddy Bug	POP	POP	ABND	LOAEL		8	d	1		ai kg/ha	100	91584
Endosulfan	Leucinodes orbonalis, Fruit borer	POP	POP	ABND	LOAEL			hv	0.07		%	100	75125
Endosulfan	Lipaphis erysimi, Turnip aphid	POP	POP	CNTL	LOAEL		1	d	0.035		%	100	75046
Endosulfan	Lipaphis erysimi, Turnip aphid	POP	POP	ABND	LOAEL		7	d	0.07		%	100	89234
Endosulfan	Lipaphis erysimi, Turnip aphid	POP	POP	ABND	NOAEL		1	d	0.035		%	100	92825
Endosulfan	Lygus elisus, Lygus Bug	POP	POP	ABND	LOAEL		3	d	0.75		Al lb/acre	100	91397
Endosulfan	Lygus elisus, Lygus Bug	POP	POP	ABND	LOAEL		4	d	1		Al lb/acre	100	91397
Endosulfan	Lymantria dispar, European gypsy moth	POP	POP	CNTL	LOAEL		3	d	0.05		%	100	92885
Endosulfan	Macrosiphum euphorbiae, Potato aphid	POP	POP	ABND	LOAEL		26	d	1.12		ai kg/ha	100	74169
Endosulfan	Macrosiphum euphorbiae, Potato aphid	POP	POP	ABND	LOAEL		26	d	1.12		ai kg/ha	100	74169
Endosulfan	Macrosiphum euphorbiae, Potato aphid	POP	POP	ABND	LOAEL		26	d	1.12		ai kg/ha	100	74169
Endosulfan	Macrosiphum euphorbiae, Potato aphid	POP	POP	ABND	LOAEL		41	d	1.12		ai kg/ha	100	74169
Endosulfan	Macrosiphum euphorbiae, Potato aphid	POP	POP	ABND	LOAEL		48	d	1.12		ai kg/ha	100	74169
Endosulfan	Macrosiphum euphorbiae, Potato aphid	POP	POP	ABND	LOAEL		48	d	1.12		ai kg/ha	100	74169
Endosulfan	Macrosiphum euphorbiae, Potato aphid	POP	POP	ABND	LOAEL		19	d	1		Al lb/acre	100	97923
Endosulfan	Macrosteles quadripunctatus, Leafhopper	POP	POP	CNTL	LOAEL		7	d	0.05		%	100	93250

Table H-11 Arthropod Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Maruca testulalis, Bean Pod Borer	POP	POP	ABND	LOAEL		25	d	1.1		Al kg/ha	35	48721
Endosulfan	Maruca testulalis, Bean Pod Borer	POP	POP	ABND	LOAEL		66	d	0.6		Al kg/ha	35	48721
Endosulfan	Maruca testulalis, Bean Pod Borer	POP	POP	ABND	LOAEL		52	d	0.6		Al kg/ha	35	48721
Endosulfan	Maruca vitrata, Bean pod borer	POP	POP	CNTL	LOAEL		3	d	360		ai g/ha	100	82549
Endosulfan	Melanagromyza obtusa, Pigeonpea Podfly	POP	POP	ABND	NOAEL		89	d	700		ai g/ha	100	100338
Endosulfan	Melanagromyza obtusa, Pigeonpea Podfly	POP	POP	ABND	LOAEL		89	d	700		ai g/ha	100	100338
Endosulfan	Melittia satyriniformis, Squash vine borer	POP	POP	ABND	LOAEL		54	d	0.75		Al lb/acre	100	76032
Endosulfan	Murgantia histrionica, Harlequin Bug	POP	POP	ABND	LOAEL		NA	hv	1		Al lb/acre	100	82736
Endosulfan	Nisaga simplex, Rice Hairy Caterpillar	POP	POP	CNTL	LOAEL		7	d	0.5		ai kg/ha	100	91429
Endosulfan	NR NR, Ladybird beetle family	POP	POP	ABND	LOAEL		>=7	d	735		ai g/ha	100	77182
Endosulfan	NR NR, Waterbug order	POP	POP	ABND	NOAEL		>=7	d	735		ai g/ha	100	77182
Endosulfan	NR NR, Waterbug order	POP	POP	ABND	NOAEL		>=7	d	735		ai g/ha	100	77182
Endosulfan	NR NR, Ladybird beetle family	POP	POP	ABND	NOAEL		>=7	d	735		ai g/ha	100	77182
Endosulfan	NR NR, Ladybird beetle family	POP	POP	ABND	LOAEL		>=7	d	735		ai g/ha	100	77182
Endosulfan	NR NR, Waterbug order	POP	POP	ABND	LOAEL		>=7	d	735		ai g/ha	100	77182
Endosulfan	NR NR, Insect class	POP	POP	ABND	LOAEL		NA	hv	1		Al lb/acre	100	82736
Endosulfan	NR NR, Whitefly family	POP	POP	ABND	LOAEL		NR	stg	875		ai g/ha	100	92630

Table H-11 Arthropod Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	NR NR, Scarab beetle family	POP	POP	ABND	LOAEL		1	d	0.07		%	100	89007
Endosulfan	NR NR, Scarab beetle family	POP	POP	ABND	LOAEL		1	d	0.07		%	100	89007
Endosulfan	NR NR, Scarab beetle family	POP	POP	ABND	LOAEL		1	d	0.07		%	100	89007
Endosulfan	NR NR, Moth and butterfly order	POP	POP	ABND	LOAEL		NA	hv	2.511		L/ha	100	100285
Endosulfan	NR NR, Moth and butterfly order	POP	POP	ABND	NOAEL		NA	hv	2.511		L/ha	100	100285
Endosulfan	NR NR, Aphid family	POP	POP	ABND	NOAEL		54	d	0.75		AI lb/acre	100	88084
Endosulfan	NR NR, Moth and butterfly order	POP	POP	ABND	NOAEL		54	d	0.75		AI lb/acre	100	88084
Endosulfan	NR NR, Moth and butterfly order	POP	POP	CNTL	LOAEL		NA	hv	0.07		%	100	51849
Endosulfan	NR NR, Moth and butterfly order	POP	POP	ABND	LOAEL		15	d	0.07		AI %	100	93223
Endosulfan	NR NR, Moth and butterfly order	POP	POP	ABND	LOAEL		15	d	0.07		AI %	100	93223
Endosulfan	NR NR, Moth and butterfly order	POP	POP	ABND	LOAEL		15	d	0.07		AI %	100	93223
Endosulfan	NR NR, Moth and butterfly order	POP	POP	ABND	LOAEL		51	d	1		AI lb/acre	100	97923
Endosulfan	NR NR, Stink bug family	POP	POP	ABND	LOAEL		51	d	1		AI lb/acre	100	97923
Endosulfan	NR NR, Leafhopper family	POP	POP	CNTL	LOAEL		7 TO 21	d	2		AI lb/acre	100	50972
Endosulfan	NR NR, Leaf bug family	POP	POP	CNTL	LOAEL		7 TO 21	d	2		AI lb/acre	100	50972
Endosulfan	NR NR, Grasshopper/Cricket/Locust order	POP	POP	CNTL	LOAEL		7 TO 21	d	2		AI lb/acre	100	50972
Endosulfan	NR NR, Moth and butterfly order	POP	POP	ABND	NOAEL		7	d	1		AI lb/acre	100	92334

Table H-11 Arthropod Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	NR NR, Insect class	POP	POP	ABND	NOAEL		10	d	0.84		Al kg/ha	100	79804
Endosulfan	NR NR, Insect class	POP	POP	ABND	NOAEL			hv	0.84		Al kg/ha	100	79805
Endosulfan	NR NR, Aphid family	POP	POP	CNTL	NOAEL			gs	0.05		%	100	82101
Endosulfan	NR NR, Termite order	POP	POP	CNTL	LOAEL			hv	2.625		ml/kg sd	35	10466 5
Endosulfan	NR NR, Collembola order	POP	POP	CNTL	LOAEL		60	d	1		ml/L	100	72297
Endosulfan	Oligonychus coffeae, Tea Red Spider Mite	POP	POP	ABND	LOAEL		1	d	0.025		Al %	100	40255
Endosulfan	Oligonychus coffeae, Tea Red Spider Mite	POP	POP	ABND	LOAEL		37	d	0.04		Al %	100	82282
Endosulfan	Oligonychus indicus, Sugarcane Leaf Mite	POP	POP	ABND	LOAEL		1	d	0.05		%	100	92547
Endosulfan	Operophtera brumata, European Winter Moth	POP	POP	ABND	NOAEL		24	d	0.5		Al lb/100 gal	50	93065
Endosulfan	Operophtera brumata, European Winter Moth	POP	POP	ABND	LOAEL		7	d	0.5		Al lb/100 gal	50	93065
Endosulfan	Operophtera brumata, European Winter Moth	POP	POP	ABND	LOAEL		22	d	0.5		Al lb/100 gal	50	93065
Endosulfan	Operophtera brumata, European Winter Moth	POP	POP	ABND	LOAEL		8	d	0.5		Al lb/100 gal	50	93065
Endosulfan	Ophiomyia phaseoli, Bean Fly	POP	POP	ABND	LOAEL		28	d	5		ai g/kg sd	50	89242
Endosulfan	Ophiomyia phaseoli, Bean Fly	POP	POP	ABND	LOAEL		28	d	5		ai g/kg sd	50	89242
Endosulfan	Orseolia oryzae, Asian rice gall midge	POP	POP	ABND	NOAEL		<60	d	1		Al kg/ha	100	74590
Endosulfan	Pectinophora gossypiella, Pink bollworm	POP	POP	ABND	LOAEL		126	d	700		Al g/ha	100	98983
Endosulfan	Pectinophora gossypiella, Pink bollworm	POP	POP	ABND	LOAEL		129	d	700		Al g/ha	100	98983

Table H-11 Arthropod Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Pectinophora gossypiella, Pink bollworm	POP	POP	ABND	LOAEL		NA	hv	0.06		AI %	100	100289
Endosulfan	Phyllocnistis citrella, Citrus Leafminer	POP	POP	CNTL	LOAEL		3	d	0.07		%	100	83224
Endosulfan	Phyllotreta cruciferae, Crucifer flea beetle	POP	POP	ABND	LOAEL		6	d	0.75		AI lb/acre	100	88850
Endosulfan	Phyllotreta cruciferae, Crucifer flea beetle	POP	POP	ABND	NOAEL		14	d	0.75		AI lb/acre	100	88715
Endosulfan	Phyllotreta cruciferae, Crucifer flea beetle	POP	POP	CNTL	LOAEL		11	d	0.84		ai kg/ha	100	79290
Endosulfan	Phyllotreta cruciferae, Crucifer flea beetle	POP	POP	CNTL	LOAEL		8	d	1		AI lb/acre	3	92088
Endosulfan	Phyllotreta cruciferae, Crucifer flea beetle	POP	POP	CNTL	NOAEL		8	d	1		AI lb/acre	3	92088
Endosulfan	Phyllotreta cruciferae, Crucifer flea beetle	POP	POP	ABND	LOAEL		3	d	1		AI lb/acre	100	103289
Endosulfan	Pieris brassicae, Large white butterfly	POP	POP	ABND	LOAEL		1	d	0.7		AI kg/ha	100	89393
Endosulfan	Pieris brassicae, Large white butterfly	POP	POP	ABND	LOAEL		1	d	0.7		AI kg/ha	100	89393
Endosulfan	Plutella xylostella, Diamondback moth	POP	POP	ABND	NOAEL		8	d	1		AI lb/acre	100	82473
Endosulfan	Plutella xylostella, Diamondback moth	POP	POP	ABND	NOAEL		54	d	0.75		AI lb/acre	100	88084
Endosulfan	Plutella xylostella, Diamondback moth	POP	POP	CNTL	LOAEL		4	d	1		AI lb/acre	3	90586
Endosulfan	Plutella xylostella, Diamondback moth	POP	POP	CNTL	LOAEL		25	d	0.75		AI lb/acre	100	92317
Endosulfan	Polyphagotarsonemus latus, Broad Mite	POP	POP	ABND	LOAEL		7	d	0.025		AI %	100	40255
Endosulfan	Rhopalosiphum maidis, Corn Leaf Aphid	POP	POP	ABND	LOAEL		1	d	0.05		%	100	92547
Endosulfan	Rogas sp., Braconid Wasp	POP	POP	ABND	LOAEL		89	d	350		ppm	35	99594

Table H-11 Arthropod Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Scirpophaga incertulas, Rice Stem Borer	POP	POP	ABND	NOAEL		<=100	d	1		Al kg/ha	100	74590
Endosulfan	Scirpophaga incertulas, Rice Stem Borer	POP	POP	CNTL	LOAEL		30	d	0.5		Al kg/ha	35	91647
Endosulfan	Sitodiplosis mosellana, Wheat midge	POP	POP	ABND	LOAEL		22	d	625		Al g/ha	100	92751
Endosulfan	Spilosoma obliqua, Bihar Hairy Caterpillar	POP	POP	CNTL	LOAEL		3	d	0.05		%	100	10458 1
Endosulfan	Spodoptera exigua, Beet Armyworm	POP	POP	ABND	LOAEL		2	d	0.04		%	100	47193
Endosulfan	Spodoptera litura, Common cutworm	POP	POP	CNTL	LOAEL		2	d	0.01645		%	35	92551
Endosulfan I	Spodoptera litura, Common cutworm	POP	POP	CNTL	LOAEL		2	d	0.01645		%	35	92551
Endosulfan	Spodoptera litura, Common cutworm	POP	POP	CNTL	LOAEL		2	d	0.7		L	35	92884
Endosulfan	Synanthedon scitula, Dogwood borer	POP	POP	ABND	LOAEL		~120	d	0.34		ai kg/379 l	100	82539
Endosulfan	Synanthedon scitula, Dogwood borer	POP	POP	ABND	LOAEL		454	d	90		Al g/100 L	50	92914
Endosulfan	Synanthedon scitula, Dogwood borer	POP	POP	ABND	LOAEL		~330	d	90		Al g/100 L	50	92914
Endosulfan	Synanthedon scitula, Dogwood borer	POP	POP	ABND	LOAEL		~300	d	90		Al g/100 L	50	92914
Endosulfan	Tetranychus urticae, Two-spotted spider mite	POP	POP	ABND	NOAEL		>=7	d	735		ai g/ha	100	77182
Endosulfan	Tetranychus urticae, Two-spotted spider mite	POP	POP	ABND	LOAEL		>=7	d	735		ai g/ha	100	77182
Endosulfan	Tetranychus urticae, Two-spotted spider mite	POP	POP	ABND	LOAEL		>=7	d	735		ai g/ha	100	77182
Endosulfan	Thrips sp., Common Thrip	POP	POP	ABND	LOAEL		3	d	0.035		%	100	89153
Endosulfan	Thrips sp., Common Thrip	POP	POP	ABND	LOAEL		3	d	0.035		%	100	89153

Table H-11 Arthropod Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Thrips tabaci, Onion thrip	POP	POP	ABND	LOAEL		3	d	0.75		Al lb/acre	100	91397
Endosulfan	Trichogramma chilonis, Parasitic Wasp	POP	POP	ABND	LOAEL		4	d	350000		ppm	100	104985
Endosulfan	Trichogramma pretiosum, Parasitic wasp	POP	POP	SEXR	NOAEL		1	d	0.56		Al kg/ha	100	37276
Endosulfan	Trichogramma pretiosum, Parasitic wasp	POP	POP	ABND	LOAEL		2	d	875		Al g/300 L	100	88020
Endosulfan	Trichogramma pretiosum, Parasitic wasp	POP	POP	ABND	LOAEL		2	d	875		Al g/300 L	100	88020
Endosulfan	Trichoplusia ni, Cabbage looper	POP	POP	ABND	LOAEL		2	d	1		Al lb/acre	100	82736
Endosulfan	Trichoplusia ni, Cabbage looper	POP	POP	ABND	LOAEL		NA	hv	1		Al lb/acre	100	82736
Endosulfan	Trichoplusia ni, Cabbage looper	POP	POP	ABND	LOAEL		NA	hv	1		Al lb/acre	100	82736
Endosulfan	Trichoplusia ni, Cabbage looper	POP	POP	ABND	LOAEL		NA	hv	1		Al lb/acre	100	82736
Endosulfan	Trichoplusia ni, Cabbage looper	POP	POP	ABND	NOAEL		54	d	0.75		Al lb/acre	100	88084
Endosulfan	Trichoplusia ni, Cabbage looper	POP	POP	CNTL	LOAEL		4	d	1		Al lb/acre	3	90586
Endosulfan	Trichoplusia ni, Cabbage looper	POP	POP	CNTL	LOAEL		25	d	0.75		Al lb/acre	100	92317
Endosulfan	Zygogramma exclamationis, Sunflower Beetle	POP	POP	ABND	LOAEL		1	d	0.25		Al lb/acre	100	88659
Endosulfan	Amblyseius victoriensis, Predatory mite	REP	REP	PROG	NOAEL		28	d	66.5		ml/100 L	35	89784
Endosulfan	Archegozetes longisetosus, Mite	REP	REP	FCND	LOAEL		15	d	1.75		ml/ha	35	58741
Endosulfan	Bemisia tabaci, Sweetpotato whitefly	REP	REP	PROG	NOAEL		35	d	875		ai g/ha	100	90146
Endosulfan	Bemisia tabaci, Sweetpotato whitefly	REP	REP	PROG	NOAEL	LOAEL	21	d	656	875	ai g/ha	100	90146

Table H-11 Arthropod Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Chrysoperla carnea, Common green lacewing	REP	REP	PROG	LOAEL		>=15.3 3	d	0.07		%	100	71451
Endosulfan	Cyphoderus javanus, Springtail	REP	REP	FCND	LOAEL		15	d	0.0728		ml/ha	35	58741
Endosulfan	Lancetoppia sp., Mite	REP	REP	FCND	NOAEL		15	d	1.75		ml/ha	35	58741
Endosulfan	Schelorbates sp., Mite	REP	REP	FCND	NOAEL	LOAEL	15	d	12.495	17.5	ml/ha	35	58741
Endosulfan	Trichogramma pretiosum, Parasitic wasp	REP	REP	PROG	NOAEL		1	d	0.56		AI kg/ha	100	37276

Table H-12. Terrestrial plant data from ECOTOX. Data are arranged in alphabetical order by Effect Group. The code list for ECOTOX can be found at: <http://cfpub.epa.gov/ecotox/blackbox/help/codelist.pdf>.

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt 2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Allium cepa, Common onion	BCM	ENZ	EROD	NOAEL	LOAEL	2	d	0.00098	0.001176	ppm	98	88956
Endosulfan	Brassica napus, Colza	BCM	BCM	OLCO	NOAEL		>60	d	0.99904		lb/acre	100	63601
Endosulfan	Brassica napus, Colza	BCM	BCM	OLCO	NOAEL		>60	d	0.99904		lb/acre	100	63601
Endosulfan	Brassica napus, Colza	BCM	BCM	OLCO	NOAEL			hv	1		AI lb/acre	100	73097
Endosulfan	Brassica napus, Colza	BCM	BCM	OLCO	NOAEL			hv	1		AI lb/acre	100	73097
Endosulfan	Brassica napus, Colza	BCM	BCM	OLCO	NOAEL			hv	1		AI lb/acre	100	73097
Endosulfan	Brassica nigra, Black mustard	BCM	BCM	OLCO	NOAEL		>60	d	0.99904		lb/acre	100	63601
Endosulfan	Brassica nigra, Black mustard	BCM	BCM	OLCO	NOAEL		>60	d	0.000997		lb/acre	100	63601

Table H-12. Terrestrial Plant Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt 2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Brassica nigra, Black mustard	BCM	BCM	OLC O	NOAEL		>60	d	0.000997		lb/acre	100	63601
Endosulfan	Brassica nigra, Black mustard	BCM	BCM	OLC O	NOAEL		>60	d	0.000997		lb/acre	100	63601
Endosulfan	Brassica nigra, Black mustard	BCM	BCM	OLC O	NOAEL		>60	d	0.000997		lb/acre	100	63601
Endosulfan	Brassica nigra, Black mustard	BCM	BCM	OLC O	NOAEL		<60	d	0.000997		lb/acre	100	63601
Endosulfan	Brassica nigra, Black mustard	BCM	BCM	OLC O	LOAEL		>60	d	0.000997		lb/acre	100	63601
Endosulfan	Brassica oleracea, Cabbage	BCM	BCM	PCO N	LOAEL		7	d	0.035		%	35	89005
Endosulfan	Gossypium hirsutum, Cotton	BCM	BCM	PHP H	LOAEL		14	d	0.38982		lb/acre	100	90146
Endosulfan	Oryza sativa, Rice	BCM	BCM	NCO N	LOAEL			hv	0.2676		lb/acre	2 to 5	83926
Endosulfan	Oryza sativa, Rice	BCM	BCM	NCO N	LOAEL			hv	0.2676		lb/acre	2 to 5	83926
Endosulfan	Oryza sativa, Rice	BCM	BCM	NCO N	LOAEL			hv	0.2676		lb/acre	2 to 5	83926
Endosulfan	Oryza sativa, Rice	BCM	BCM	NCO N	NOAEL			hv	0.2676		lb/acre	2 to 5	83926
Endosulfan	Arachis hypogaea, Peanut	GRO	GRO	WGH T	NOAEL	LOAE L	30	d	10	20	ppm	100	75782
Endosulfan	Brassica napus, Colza	GRO	MPH	WGH T	NOAEL		>60	d	0.99904		lb/acre	100	63601
Endosulfan	Brassica napus, Colza	GRO	MPH	WGH T	NOAEL		>60	d	0.99904		lb/acre	100	63601
Endosulfan	Brassica napus, Colza	GRO	MPH	WGH T	NOAEL			hv	1		AI lb/acre	100	73097
Endosulfan	Brassica napus, Colza	GRO	MPH	WGH T	NOAEL			hv	1		AI lb/acre	100	73097
Endosulfan	Brassica napus, Colza	GRO	MPH	WGH T	NOAEL			hv	1		AI lb/acre	100	73097

Table H-12. Terrestrial Plant Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt 2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Brassica nigra, Black mustard	GRO	MPH	WGH T	NOAEL		>60	d	0.000997		lb/acre	100	63601
Endosulfan	Brassica nigra, Black mustard	GRO	MPH	WGH T	NOAEL		>60	d	0.000997		lb/acre	100	63601
Endosulfan	Brassica nigra, Black mustard	GRO	MPH	WGH T	NOAEL		>60	d	0.000997		lb/acre	100	63601
Endosulfan	Brassica nigra, Black mustard	GRO	MPH	WGH T	LOAEL		>60	d	0.99904		lb/acre	100	63601
Endosulfan	Brassica nigra, Black mustard	GRO	MPH	WGH T	NOAEL		>60	d	0.000997		lb/acre	100	63601
Endosulfan	Brassica nigra, Black mustard	GRO	MPH	WGH T	NOAEL		<60	d	0.000997		lb/acre	100	63601
Endosulfan	Brassica nigra, Black mustard	GRO	MPH	WGH T	NOAEL		>60	d	0.000997		lb/acre	100	63601
Endosulfan	Brassica oleracea, Cabbage	GRO	GRO	WGH T	NOAEL			hv	1		AI lb/acre	100	82736
Endosulfan	Brassica rapa, Toria	GRO	GRO	NRO T	LOAEL		6	d	0.075		AI %	100	53779
Endosulfan	Brassica rapa, Turnip	GRO	GRO	HGH T	NOAEL		NA	BLM	0.74928		lb/acre	100	79290
Endosulfan	Carica papaya, Papaya	GRO	GRO	HGH T	NOAEL		35	d	0.25		AI %	100	25114
Endosulfan	Carica papaya, Papaya	GRO	GRO	HGH T	NOAEL		35	d	0.25		AI %	25	25114
Endosulfan	Corchorus capsularis, White jute	GRO	GRO	HGH T	NOAEL			hv	0.05		AI %	100	40255
Endosulfan	Corchorus capsularis, White jute	GRO	GRO	HGH T	NOAEL			hv	0.05		AI %	100	40255
Endosulfan	Helianthus annuus, Common annual sunflower	GRO	MPH	WGH T	NOAEL			hv	0.74928		lb/acre	100	79761
Endosulfan	Lycopersicon esculentum, Tomato	GRO	GRO	WGH T	NOAEL		14	d	0.99904		lb/acre	40	26089
Endosulfan	Oryza sativa, Rice	GRO	GRO	HGH T	LOAEL			hv	0.2676		lb/acre	2 to 5	83926

Table H-12. Terrestrial Plant Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt 2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Oryza sativa, Rice	GRO	GRO	HGH T	LOAEL			hv	0.2676		lb/acre	2 to 5	83926
Endosulfan	Oryza sativa, Rice	GRO	GRO	HGH T	LOAEL			hv	0.2676		lb/acre	2 to 5	83926
Endosulfan	Oryza sativa, Rice	GRO	GRO	HGH T	LOAEL			hv	0.2676		lb/acre	2 to 5	83926
Endosulfan	Oryza sativa, Rice	GRO	MPH	WGH T	NOAEL			hv	0.2676		lb/acre	2 to 5	83926
Endosulfan	Oryza sativa, Rice	GRO	MPH	WGH T	LOAEL			hv	0.2676		lb/acre	2 to 5	83926
Endosulfan	Oryza sativa, Rice	GRO	MPH	WGH T	NOAEL			hv	0.2676		lb/acre	2 to 5	83926
Endosulfan	Oryza sativa, Rice	GRO	MPH	WGH T	NOAEL			hv	0.2676		lb/acre	2 to 5	83926
Endosulfan	Phaseolus vulgaris, Bean	GRO	GRO	NOD E	NOAEL		28	d	1800		ppm	100	53973
Endosulfan	Phaseolus vulgaris, Bean	GRO	MPH	WGH T	NOAEL		28	d	1800		ppm	100	53973
Endosulfan	Phaseolus vulgaris, Bean	GRO	DVP	EMR G	NOAEL		14	d	5		ai g/kg sd	50	89242
Endosulfan	Phaseolus vulgaris, Bean	GRO	DVP	EMR G	NOAEL		14	d	5		ai g/kg sd	50	89242
Endosulfan	Phaseolus vulgaris, Bean	GRO	DVP	EMR G	NOAEL		14	d	5		ai g/kg sd	50	89242
Endosulfan	Phaseolus vulgaris, Bean	GRO	DVP	EMR G	NOAEL		14	d	5		ai g/kg sd	50	89242
Endosulfan	Sesamum orientale, Sesame	GRO	DVP	EMR G	NOAEL		-50	d	0.07		%	100	88976
Endosulfan	Sesamum orientale, Sesame	GRO	GRO	VGO R	LOAEL		-50	d	0.07		%	100	88976
Endosulfan	Sesamum orientale, Sesame	GRO	MPH	LGT H	LOAEL		-50	d	0.07		%	100	88976
Endosulfan	Solanum melongena, Aubergine	GRO	GRO	HGH T	NOAEL			hv	0.05		%	100	75125

Table H-12. Terrestrial Plant Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt 2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Thanatephorus cucumeris, Fungi	GRO	GRO	DMT R	EC50		2	d	6		ppm	35	103728
Endosulfan	Thanatephorus cucumeris, Fungi	GRO	GRO	DMT R	EC90		2	d	>500		ppm	35	103728
Endosulfan	Triticum aestivum, Bread wheat	GRO	DVP	ABN M	NOAEL		8	d	3.5		ml/kg sd	100	64717
Endosulfan	Triticum aestivum, Bread wheat	GRO	DVP	ABN M	NOAEL		8	d	3.5		ml/kg sd	100	64717
Endosulfan	Triticum aestivum, Bread wheat	GRO	DVP	ABN M	LOAEL		8	d	3.5		ml/kg sd	100	64717
Endosulfan	Triticum aestivum, Bread wheat	GRO	DVP	ABN M	NOAEL		8	d	3.5		ml/kg sd	100	64717
Endosulfan	Triticum aestivum, Bread wheat	GRO	DVP	ABN M	NOAEL		8	d	3.5		ml/kg sd	100	64717
Endosulfan	Triticum aestivum, Bread wheat	GRO	DVP	ABN M	NOAEL		8	d	3.5		ml/kg sd	100	64717
Endosulfan	Triticum aestivum, Bread wheat	GRO	DVP	ABN M	NOAEL		8	d	3.5		ml/kg sd	100	64717
Endosulfan	Triticum aestivum, Bread wheat	GRO	DVP	ABN M	NOAEL		8	d	3.5		ml/kg sd	100	64717
Endosulfan	Vigna unguiculata, Black-eyed pea	GRO	GRO	BMA S	LOAEL		7	d	0.5352		lb/acre	35	48721
Endosulfan	Vigna unguiculata, Black-eyed pea	GRO	GRO	BMA S	LOAEL		14	d	0.5352		lb/acre	35	48721
Endosulfan	Phaseolus vulgaris, Bean	MOR	MOR	MOR T	NOAEL		14	d	5		ai g/kg sd	50	89242
Endosulfan	Phaseolus vulgaris, Bean	MOR	MOR	MOR T	NOAEL		14	d	5		ai g/kg sd	50	89242
Endosulfan	Scenedesmus hystrix, Algae	MOR	MOR	MOR T	NR-LETH			d	0.1155		%	35	50746
Endosulfan	Scenedesmus hystrix, Algae	MOR	MOR	MOR T	NR-LETH			d	0.1155		%	35	50746
Endosulfan	Scenedesmus hystrix, Algae	MOR	MOR	MOR T	NR-LETH			d	0.1155		%	35	50746

Table H-12. Terrestrial Plant Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt 2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Arachis hypogaea, Peanut	PHY	INJ	DAM G	NOAEL		15	d	22.3		lb/acre	100	91578
Endosulfan	Arachis hypogaea, Peanut	PHY	INJ	DAM G	NOAEL		15	d	22.3		lb/acre	100	91578
Endosulfan	Brassica rapa, Turnip	PHY	INJ	DAM G	LOAEL			hv	0.05		%	100	93250
Endosulfan	Citrullus lanatus, Watermelon	PHY	INJ	GINJ	NOAEL		7	d	0.03		%	100	41604
Endosulfan	Citrullus lanatus, Watermelon	PHY	INJ	GINJ	NOAEL		7	d	0.04		%	100	41604
Endosulfan	Cucumis melo, Honeydew	PHY	IMM	GIM M	NOAEL		81	d	0.5		lb/acre	100	105074
Endosulfan	Cucumis sativus, Cucumber	PHY	INJ	GINJ	NOAEL		7	d	0.03		%	100	41604
Endosulfan	Cucumis sativus, Cucumber	PHY	INJ	GINJ	LOAEL		3	d	0.04		%	100	41604
Endosulfan	Cucumis sativus, Cucumber	PHY	INJ	DAM G	NOAEL		3	d	0.05		%	100	101461
Endosulfan	Cucumis sativus, Cucumber	PHY	INJ	DAM G	NOAEL	LOAE L	3	d	0.03	0.05	%	100	101461
Endosulfan	Cucurbita sp., Squash	PHY	INJ	DAM G	LOAEL		3	d	0.03		%	100	101461
Endosulfan	Glomus mosseae, Fungus	PHY	PHY	MYC O	LOAEL		14	d	2.5		ppm	50	72302
Endosulfan	Lagenaria siceraria, Bottle gourd	PHY	INJ	GINJ	NOAEL		7	d	0.03		%	100	41604
Endosulfan	Lagenaria siceraria, Bottle gourd	PHY	INJ	GINJ	NOAEL		7	d	0.04		%	100	41604
Endosulfan	Lycopersicon esculentum, Tomato	PHY	IMM	IFCT	NOAEL			hv	1		Al lb/acre	100	98097
Endosulfan	NR NR, Bean/legume family	PHY	INJ	DAM G	NOAEL			hv	0.05		%	100	89012
Endosulfan	Phaseolus vulgaris, Bean	PHY	PHY	NFIX	NOAEL		6	d	1800		ppm	100	53973

Table H-12. Terrestrial Plant Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt 2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Piper nigrum, Black Pepper	PHY	INJ	DAM G	NOAEL		1095	d	0.05		%	100	91474
Endosulfan	Piper nigrum, Black Pepper	PHY	INJ	DAM G	NOAEL		1095	d	0.05		%	100	91474
Endosulfan	Solanum tuberosum, Potato	PHY	INJ	DAM G	NOAEL		<60	d	0.37018		lb/acre	100	79792
Endosulfan	Solanum tuberosum, Potato	PHY	INJ	DAM G	NOAEL		<60	d	0.37018		lb/acre	100	79768
Endosulfan	Vigna unguiculata, Black-eyed pea	PHY	INJ	DAM G	NOAEL		25	d	0.9812		lb/acre	35	48721
Endosulfan	Vigna unguiculata, Black-eyed pea	PHY	INJ	DAM G	LOAEL		66	d	0.5352		lb/acre	35	48721
Endosulfan	Vigna unguiculata, Black-eyed pea	PHY	INJ	DAM G	LOAEL		52	d	0.5352		lb/acre	35	48721
Endosulfan	Allium cepa, Common onion	POP	POP	ABN D	NOAEL		2	d	3.7464		lb/acre	35	89316
Endosulfan	Allium cepa, Common onion	POP	POP	BMA S	NOAEL			hv	0.1		%	100	91445
Endosulfan	Allium cepa, Common onion	POP	POP	BMA S	NOAEL			hv	0.1		%	100	91445
Endosulfan	Allium cepa, Common onion	POP	POP	BMA S	NOAEL			hv	0.1		%	100	91445
Endosulfan	Arachis hypogaea, Peanut	POP	POP	BMA S	NOAEL			hv	2.23		lb/acre	10	79943
Endosulfan	Arachis hypogaea, Peanut	POP	POP	BMA S	NOAEL		30	d	0.892		lb/acre	4	80101
Endosulfan	Arachis hypogaea, Peanut	POP	POP	BMA S	NOAEL		20	d	0.892		lb/acre	4	80101
Endosulfan	Arachis hypogaea, Peanut	POP	POP	BMA S	NOAEL			hv	2.23		lb/acre	10	80106
Endosulfan	Arachis hypogaea, Peanut	POP	POP	BMA S	NOAEL		30	d	25		ppm	50	72302
Endosulfan	Arachis hypogaea, Peanut	POP	POP	BMA S	NOAEL			hv	22.3		lb/acre	100	91578

Table H-12. Terrestrial Plant Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt 2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Arachis hypogaea, Peanut	POP	POP	BMA S	NOAEL			hv	22.3		lb/acre	100	91578
Endosulfan	Ascochyta pisi, Fungus	POP	POP	ABN D	NOAEL			hv	0.07		%	100	90419
Endosulfan	Brassica juncea, Brown mustard	POP	POP	BMA S	NOAEL			hv	0.035		%	100	75046
Endosulfan	Brassica juncea, Brown mustard	POP	POP	BMA S	NOAEL			hv	0.07		%	100	89234
Endosulfan	Brassica napus, Colza	POP	POP	BMA S	NOAEL		>60	d	0.99904		lb/acre	100	63601
Endosulfan	Brassica napus, Colza	POP	POP	BMA S	NOAEL		>60	d	0.99904		lb/acre	100	63601
Endosulfan	Brassica napus, Colza	POP	POP	BMA S	NOAEL			hv	1		AI lb/acre	100	73097
Endosulfan	Brassica napus, Colza	POP	POP	BMA S	NOAEL			hv	1		AI lb/acre	100	73097
Endosulfan	Brassica napus, Colza	POP	POP	BMA S	NOAEL			hv	1		AI lb/acre	100	73097
Endosulfan	Brassica napus, Colza	POP	POP	BMA S	NOAEL			hv	1		AI lb/acre	50	104666
Endosulfan	Brassica napus, Colza	POP	POP	CNT L	LOAEL		5	d	1		AI lb/acre	50	104666
Endosulfan	Brassica nigra, Black mustard	POP	POP	BMA S	NOAEL		>60	d	0.99904		lb/acre	100	63601
Endosulfan	Brassica nigra, Black mustard	POP	POP	BMA S	NOAEL		>60	d	0.000997		lb/acre	100	63601
Endosulfan	Brassica nigra, Black mustard	POP	POP	BMA S	NOAEL		>60	d	0.000997		lb/acre	100	63601
Endosulfan	Brassica nigra, Black mustard	POP	POP	BMA S	NOAEL		>60	d	0.000997		lb/acre	100	63601
Endosulfan	Brassica nigra, Black mustard	POP	POP	BMA S	NOAEL		>60	d	0.000997		lb/acre	100	63601
Endosulfan	Brassica nigra, Black mustard	POP	POP	BMA S	NOAEL		<60	d	0.000997		lb/acre	100	63601

Table H-12. Terrestrial Plant Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt 2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Brassica nigra, Black mustard	POP	POP	BMA S	NOAEL		>60	d	0.000997		lb/acre	100	63601
Endosulfan	Brassica oleracea, Cabbage	POP	POP	BMA S	NOAEL			hv	0.6244		lb/acre	100	89393
Endosulfan	Brassica oleracea, Cabbage	POP	POP	BMA S	NOAEL			hv	0.6244		lb/acre	100	89393
Endosulfan	Brassica rapa, Turnip	POP	POP	ABN D	NOAEL		NR	gm	0.75		AI lb/acre	100	88850
Endosulfan	Brassica rapa, Turnip	POP	POP	BMA S	NOAEL			hv	0.74928		lb/acre	100	79290
Endosulfan	Cajanus cajan, Pigeonpea	POP	POP	BMA S	NOAEL			hv	0.3204		lb/acre	100	82549
Endosulfan	Cajanus cajan, Pigeonpea	POP	POP	BMA S	NOAEL			hv	0.07		AI %	100	89154
Endosulfan	Cajanus cajan, Pigeonpea	POP	POP	BMA S	NOAEL			hv	0.07		AI %	100	89154
Endosulfan	Cajanus cajan, Pigeonpea	POP	POP	BMA S	NOAEL			hv	0.07		AI %	100	89154
Endosulfan	Cajanus cajan, Pigeonpea	POP	POP	ABN D	NOAEL		89	d	0.623		lb/acre	100	100338
Endosulfan	Carthamus tinctorius, Safflower	POP	POP	BMA S	NOAEL			hv	1		AI lb/acre	100	91397
Endosulfan	Cicer arietinum, Chick Pea	POP	POP	ABN D	LOAEL		0	ma	0.07		%	100	75773
Endosulfan	Cicer arietinum, Chick Pea	POP	POP	BMA S	NOAEL		0	ma	0.07		%	100	75773
Endosulfan	Cicer arietinum, Chick Pea	POP	POP	BMA S	NOAEL		0	ma	0.07		%	100	75773
Endosulfan	Cicer arietinum, Chick Pea	POP	POP	BMA S	NOAEL			hv	0.3738		lb/acre	100	92940
Endosulfan	Corchorus capsularis, White jute	POP	POP	BMA S	NOAEL			hv	0.05		AI %	100	40255
Endosulfan	Corchorus capsularis, White jute	POP	POP	BMA S	NOAEL			hv	0.05		AI %	100	40255

Table H-12. Terrestrial Plant Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt 2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Corchorus capsularis, White jute	POP	POP	BMA S	NOAEL			hv	0.04		AI %	100	82282
Endosulfan	Cucumis melo, Honeydew	POP	POP	BMA S	NOAEL			hv	0.5		lb/acre	100	105074
Endosulfan	Cucumis sativus, Cucumber	POP	POP	BMA S	NOAEL		61	d	1		AI lb/acre	3	104463
Endosulfan	Cucurbita moschata, Squash	POP	POP	BMA S	NOAEL		54	d	0.75		AI lb/acre	100	76032
Endosulfan	Cucurbita pepo, Vegetable marrow	POP	POP	BMA S	NOAEL			hv	1		AI lb/acre	100	104289
Endosulfan	Drechslera sp., Leaf spot	POP	POP	ABN D	LOAEL		~240	d	1.4		AI l/ha	35	92164
Endosulfan	Erysiphe polygoni, Powdery Mildew Fungus	POP	POP	ABN D	NOAEL			hv	0.07		%	100	90419
Endosulfan	Glomus fasciculatum, Fungi	POP	POP	RCL N	NOAEL	LOAE L	60	d	1	2	ml/L	100	72297
Endosulfan	Gossypium hirsutum, Cotton	POP	POP	BMA S	NOAEL			hv	0.99904		lb/acre	100	81336
Endosulfan	Gossypium hirsutum, Cotton	POP	POP	BMA S	NOAEL		NR	stg	0.77875		lb/acre	100	92630
Endosulfan	Gossypium hirsutum, Cotton	POP	POP	BMA S	NOAEL			hv	2.511		L/ha	100	100285
Endosulfan	Gossypium hirsutum, Cotton	POP	POP	BMA S	NOAEL			hv	2.511		L/ha	100	100285
Endosulfan	Gossypium hirsutum, Cotton	POP	POP	BMA S	NOAEL		120	d	0.75		AI lb/acre	3	92325
Endosulfan	Gossypium sp., Cotton	POP	POP	BMA S	NOAEL			hv	0.06		AI %	100	100289
Endosulfan	Helianthus annuus, Common annual sunflower	POP	POP	BMA S	NOAEL			hv	0.74928		lb/acre	100	79761
Endosulfan	Helianthus annuus, Common annual sunflower	POP	POP	BMA S	NOAEL			hv	0.05		%	100	104581
Endosulfan	Helianthus annuus, Common annual sunflower	POP	POP	BMA S	NOAEL			hv	0.05		%	100	104581

Table H-12. Terrestrial Plant Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt 2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Hirsutella nodulosa, Fungus	POP	POP	ABN D	NOAEL	LOAE L	25	d	0.005	0.05	AI ml/L	100	97446
Endosulfan	Hordeum vulgare, Barley	POP	POP	BMA S	NOAEL			hv	2.625		ml/kg sd	35	104665
Endosulfan	Ipomoea batatas, Sweet potato	POP	POP	BMA S	NOAEL			hv	1.1125		lb/acre	100	89011
Endosulfan	Lactuca sativa, Lettuce	POP	POP	BMA S	EC50		7	d	>950		ppm	>=95	46533
Endosulfan	Lactuca sativa, Lettuce	POP	POP	BMA S	EC50		7	d	>950		ppm	>=95	46533
Endosulfan	Lactuca sativa, Lettuce	POP	POP	BMA S	EC50		14	d	>950		ppm	>=95	46533
Endosulfan	Lactuca sativa, Lettuce	POP	POP	BMA S	EC50		14	d	>950		ppm	>=95	46533
Endosulfan	Lupinus albus, Egyptian lupine	POP	POP	BMA S	NOAEL			hv	0.74928		lb/acre	100	79804
Endosulfan	Lupinus albus, Egyptian lupine	POP	POP	BMA S	NOAEL			hv	0.74928		lb/acre	100	79805
Endosulfan	Lycopersicon esculentum, Tomato	POP	POP	ABN D	NOAEL		>30	d	1		AI lb/acre	100	82732
Endosulfan	Lycopersicon esculentum, Tomato	POP	POP	ABN D	NOAEL		>30	d	1		AI lb/acre	100	82732
Endosulfan	Lycopersicon esculentum, Tomato	POP	POP	BMA S	NOAEL			hv	1		AI lb/acre	100	98097
Endosulfan	Lycopersicon esculentum, Tomato	POP	POP	BMA S	NOAEL		100	d	0.3568		lb/acre	35	54251
Endosulfan	Manilkara zapota, Sapodilla	POP	POP	BMA S	NOAEL			hv	0.07		AI %	100	93223
Endosulfan	Medicago sativa, Alfalfa	POP	POP	BMA S	NOAEL			hv	2		AI lb/acre	100	50972
Endosulfan	NR NR, Fungi family	POP	POP	ABN D	LOAEL		10	d	5		ppm	100	75782
Endosulfan	NR NR, Fungi Kingdom	POP	POP	ABN D	NOAEL		21	d	10		ppm	50	69689

Table H-12. Terrestrial Plant Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt 2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	NR NR, Fungi Kingdom	POP	POP	ABN D	NOAEL		21	d	10		ppm	92	69689
Endosulfan	NR NR, Bean/legume family	POP	POP	BMA S	NOAEL			hv	0.05		%	100	89012
Endosulfan	Oryza sativa, Rice	POP	POP	ABN D	NOAEL			hv	0.892		lb/acre	100	91584
Endosulfan	Oryza sativa, Rice	POP	POP	ABN D	NOAEL			hv	0.892		lb/acre	100	74590
Endosulfan	Oryza sativa, Rice	POP	POP	BMA S	NOAEL			hv	0.2676		lb/acre	2 to 5	83926
Endosulfan	Oryza sativa, Rice	POP	POP	BMA S	LOAEL			hv	0.2676		lb/acre	2 to 5	83926
Endosulfan	Oryza sativa, Rice	POP	POP	BMA S	LOAEL			hv	0.2676		lb/acre	2 to 5	83926
Endosulfan	Oryza sativa, Rice	POP	POP	BMA S	LOAEL			hv	0.2676		lb/acre	2 to 5	83926
Endosulfan	Oryza sativa, Rice	POP	POP	BMA S	NOAEL			hv	0.446		lb/acre	35	91647
Endosulfan	Oryza sativa, Rice	POP	POP	BMA S	NOAEL		7	d	0.446		lb/acre	100	91429
Endosulfan	Phaseolus vulgaris, Bean	POP	POP	BMA S	NOAEL			hv	5		ai g/kg sd	50	89242
Endosulfan	Phaseolus vulgaris, Bean	POP	POP	BMA S	NOAEL			hv	5		ai g/kg sd	50	89242
Endosulfan	Phaseolus vulgaris, Bean	POP	POP	ABN D	NOAEL			hv	5		ai g/kg sd	50	89242
Endosulfan	Phaseolus vulgaris, Bean	POP	POP	ABN D	NOAEL		29	d	0.05		%	100	89083
Endosulfan	Phytophthora palmivora, Fungus	POP	POP	PGR T	ED50		3	d	56.1		ppm	94.88	103410
Endosulfan	Phytophthora palmivora, Fungus	POP	POP	PGR T	ED50		3	d	52.8		ppm	94.88	103410
Endosulfan	Ricinus communis, Castorbean	POP	POP	BMA S	NOAEL		3	gs	4		%	100	91434

Table H-12. Terrestrial Plant Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt 2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Sesamum orientale, Sesame	POP	POP	BMA S	NOAEL			hv	0.7136		lb/acre	4	91627
Endosulfan	Sesamum orientale, Sesame	POP	POP	BMA S	NOAEL			hv	0.07		%	100	91627
Endosulfan	Sesamum orientale, Sesame	POP	POP	BMA S	NOAEL			hv	0.07		%	100	91627
Endosulfan	Sesamum orientale, Sesame	POP	POP	BMA S	NOAEL			hv	0.07		%	100	91627
Endosulfan	Sesamum orientale, Sesame	POP	POP	BMA S	NOAEL			hv	0.07		%	100	91627
Endosulfan	Sesamum orientale, Sesame	POP	POP	BMA S	NOAEL			hv	0.07		%	100	91627
Endosulfan	Sesamum orientale, Sesame	POP	POP	BMA S	NOAEL			hv	0.07		%	100	91627
Endosulfan	Sesamum orientale, Sesame	POP	POP	BMA S	NOAEL			hv	0.07		%	100	91627
Endosulfan	Sesamum orientale, Sesame	POP	POP	BMA S	NOAEL			hv	0.07		%	100	91627
Endosulfan	Sesamum orientale, Sesame	POP	POP	BMA S	NOAEL			hv	0.07		%	100	91627
Endosulfan	Solanum melongena, Aubergine	POP	POP	BMA S	NOAEL			hv	0.07		%	100	75125
Endosulfan	Solanum tuberosum, Potato	POP	POP	ABN D	NOAEL			hv	1		AI lb/acre	100	101031
Endosulfan	Solanum tuberosum, Potato	POP	POP	BMA S	NOAEL			hv	0.37018		lb/acre	100	79792
Endosulfan	Solanum tuberosum, Potato	POP	POP	BMA S	NOAEL			hv	0.37018		lb/acre	100	79768
Endosulfan	Solanum tuberosum, Potato	POP	POP	BMA S	NOAEL			hv	0.75		AI lb/acre	100	88871
Endosulfan	Solanum tuberosum, Potato	POP	POP	ABN D	NOAEL			hv	0.74928		lb/acre	100	79341
Endosulfan	Sorghum sp., Sorghum	POP	POP	BMA S	NOAEL			hv	0.2225		lb/acre	100	92941

Table H-12. Terrestrial Plant Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt 2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Sorghum sp., Sorghum	POP	POP	BMA S	NOAEL			hv	3.56E-05		lb/acre	100	92821
Endosulfan	Thanatephorus cucumeris, Fungi	POP	POP	CNT L	NOAEL		10	d	3		Al ml/kg	35	103728
Endosulfan	Triticum aestivum, Bread wheat	POP	POP	BMA S	NOAEL		51	d	0.55625		lb/acre	100	92751
Endosulfan	Uromyces viciae-fabae, Rust	POP	POP	ABN D	NOAEL			hv	0.07		%	100	90419
Endosulfan	Vigna radiata, Mungbean	POP	POP	BMA S	NOAEL			hv	0.035		%	100	89153
Endosulfan	Vigna unguiculata, Black-eyed pea	POP	POP	BMA S	NOAEL		51	d	0.9812		lb/acre	35	48721
Endosulfan	Vigna unguiculata, Black-eyed pea	POP	POP	BMA S	NOAEL		66	d	0.5352		lb/acre	35	48721
Endosulfan	Vigna unguiculata, Black-eyed pea	POP	POP	BMA S	NOAEL		52	d	0.9812		lb/acre	35	48721
Endosulfan	Brassica rapa, Toria	REP	REP	GER M	NOAEL		6	d	0.3		Al %	100	53779
Endosulfan	Brassica rapa, Turnip	REP	REP	GER M	LOAEL		NR	gm	0.75		Al lb/acre	100	88850
Endosulfan	Glomus fasciculatum, Fungi	REP	REP	RSU C	NOAEL	LOAE L	60	d	1	2	ml/L	100	72297
Endosulfan	Glomus mosseae, Fungus	REP	REP	SEP D	LOAEL		14	d	2.5		ppm	50	72302
Endosulfan	Hordeum vulgare, Barley	REP	REP	GER M	LOAEL		21	d	2.625		ml/kg sd	35	104665
Endosulfan	Medicago sativa, Alfalfa	REP	REP	GER M	LOAEL		7	dpp	1.784		lb/acre	5	29591
Endosulfan	Sesamum orientale, Sesame	REP	REP	GER M	NOAEL		-50	d	0.07		%	100	88976
Endosulfan	Solanum melongena, Aubergine	REP	REP	FRU T	NOAEL			hv	0.07		%	100	75125
Endosulfan	Triticum aestivum, Bread wheat	REP	REP	GER M	NOAEL		8	d	3.5		ml/kg sd	100	64717

Table H-12. Terrestrial Plant Data from ECOTOX

Chemical Name	Species	Effect Group	Effect	Meas	Endpt1	Endpt 2	Dur	Dur Unit	Conc Value1	Conc Value2	Conc Units	% Purity	Ref #
Endosulfan	Triticum aestivum, Bread wheat	REP	REP	GER M	LOAEL		8	d	3.5		ml/kg sd	100	64717
Endosulfan	Triticum aestivum, Bread wheat	REP	REP	GER M	LOAEL		8	d	3.5		ml/kg sd	100	64717
Endosulfan	Triticum aestivum, Bread wheat	REP	REP	GER M	LOAEL		8	d	3.5		ml/kg sd	100	64717
Endosulfan	Triticum aestivum, Bread wheat	REP	REP	GER M	NOAEL		8	d	3.5		ml/kg sd	100	64717
Endosulfan	Triticum aestivum, Bread wheat	REP	REP	GER M	NOAEL		8	d	3.5		ml/kg sd	100	64717
Endosulfan	Triticum aestivum, Bread wheat	REP	REP	GER M	LOAEL		8	d	3.5		ml/kg sd	100	64717
Endosulfan	Triticum aestivum, Bread wheat	REP	REP	GER M	LOAEL		8	d	3.5		ml/kg sd	100	64717
Endosulfan	Triticum aestivum, Bread wheat	REP	REP	GER M	LOAEL		8	d	3.5		ml/kg sd	100	64717
Endosulfan	Triticum aestivum, Bread wheat	REP	REP	GER M	LOAEL		8	d	3.5		ml/kg sd	100	64717
Endosulfan	Triticum aestivum, Bread wheat	REP	REP	GER M	LOAEL		8	d	3.5		ml/kg sd	100	64717
Endosulfan	Triticum aestivum, Bread wheat	REP	REP	GER M	LOAEL		8	d	3.5		ml/kg sd	100	64717
Endosulfan	Triticum aestivum, Bread wheat	REP	REP	GER M	LOAEL		8	d	3.5		ml/kg sd	100	64717
Endosulfan	Triticum aestivum, Bread wheat	REP	REP	GER M	LOAEL		8	d	3.5		ml/kg sd	100	64717
Endosulfan	Triticum aestivum, Bread wheat	REP	REP	GER M	LOAEL		8	d	3.5		ml/kg sd	100	64717
Endosulfan	Triticum aestivum, Bread wheat	REP	REP	GER M	LOAEL		8	d	3.5		ml/kg sd	100	64717
Endosulfan	Vigna sp., Cowpea	REP	REP	GER M	NOAEL		7	dpp	1.784		lb/acre	5	29591

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