

APPENDIX A: ECOLOGICAL EFFECTS DATA

Pesticide Name: Prometryn

PC Code: 080805

Habitat	Taxa	Effect Type	Endpoint	Value	Unit	Toxicity category	Study Classification	Source (MRID, author)
Aquatic	Freshwater fish Rainbow Trout (<i>Oncorhynchus mykiss</i>)	Acute	96h LC50	2.9	mg/L	Moderately Toxic	Acceptable	00070686 Beliles, Scott, & Knott 1965
Aquatic	Freshwater fish Bluegill sunfish (<i>Lepomis macrochirus</i>)	Acute	96h LC50	10	mg/L	Slightly Toxic	Acceptable	00070686 Beliles, Scott, & Knott 1965
Aquatic	Freshwater fish Goldfish (<i>Carrassius auratus</i>)	Acute	96h LC50	4.0	mg/L	Moderately Toxic	Supplemental	00070686 Beliles, Scott, & Knott 1965
Aquatic*	Freshwater fish Rainbow Trout (<i>Oncorhynchus mykiss</i>)	Acute	96h LC50	9.6	mg/L	Moderately Toxic	Acceptable	00024738 McCann 1970
Aquatic*	Freshwater fish Bluegill sunfish (<i>Lepomis macrochirus</i>)	Acute	96h LC50	21	mg/L	Slightly Toxic	Acceptable	00040692 McCann 1970
Aquatic ⁺	Freshwater fish Rainbow Trout (<i>Oncorhynchus mykiss</i>)	Acute	96h LC50	7.2	mg/L	Moderately Toxic	Acceptable	00121154 McCann 1970
Aquatic ⁺	Freshwater fish Bluegill sunfish (<i>Lepomis macrochirus</i>)	Acute	96h LC50	10	mg/L	Moderately Toxic	Acceptable	00121155 McCann 1971
Aquatic	Freshwater fish Fathead Minnow (<i>Pimephales promelas</i>)	Chronic	28d NOAEC	0.62	mg/L	---	Acceptable	43081702 Graves, Mank, & Swigert 1995

Aquatic	Freshwater fish Fathead Minnow (<i>Pimephales promelas</i>)	Chronic	32d NOAEC 32d LOAEC	800 1390	µg/L	---	Invalid	40573721 Hamaker 1985
Aquatic	Freshwater invertebrate Water flea (<i>Daphnia magna</i>)	Acute	48h EC50	18.59	mg/L	Slightly Toxic	Acceptable	00070146 Vilkas 1977
Aquatic	Freshwater invertebrate Water flea (<i>Daphnia magna</i>)	Chronic	21d NOAEC	1.0	mg/L	Moderately Toxic	Acceptable	40573720 Surprenant 1988
Aquatic	Marine/Estuarine Mollusk Eastern oyster (<i>Crassostrea virginica</i>)	Acute	96h EC50	> 1.0	mg/L	Moderately Toxic	Supplemental	40228401
Aquatic	Marine/Estuarine invertebrate Mysid shrimp (<i>Mysidopsis bahia</i>)	Acute	96h LC50	1.7	mg/L	Moderately Toxic	Acceptable	40573718 Surprenant 1988
Aquatic	Marine/Estuarine invertebrate Quahog Clam <i>Mercenaria mercenaria</i>	Acute	48h EC50	21	mg/L	Slightly Toxic	Acceptable	40573719 Surprenant 1988
Aquatic	Marine/Estuarine fish Sheepshead Minnow (<i>Cyprinodon variegatus</i>)	Acute	96h LC50	5.1	mg/L	Moderately Toxic	Acceptable	40573717 Surprenant 1988
Aquatic plants	Vascular aquatic plant Duckweed (<i>Lemna gibba</i>)	Acute	14d EC50 14d NOAEC	11.8 4.0	µg/L µg/L	Mortality	Acceptable	42520901 Hughes & Alexander 1992
Aquatic plants	Non-vascular aquatic plant Freshwater diatom (<i>Navicula pelliculosa</i>)	Acute	5d EC50 5d NOAEC	1.0 0.3	µg/L µg/L	Mortality	Acceptable	42620201 Hughes & Alexander 1992
Aquatic plants	Non-vascular aquatic plant Green algae (<i>Selenastrum capricornutum</i>)	Acute	7d EC50 7d NOAEC	0.023 0.008	mg/L mg/L	Growth	Acceptable	42520903 Hughes 1987
Aquatic plants	Non-vascular aquatic plant Marine diatom (<i>Skeletonema costatum</i>)	Acute	5d EC50 5d NOAEC	7.6 2.2	µg/L µg/L	Growth	Acceptable	42620202 Hughes & Alexander 1993

Aquatic plants	Non-vascular aquatic plant Blue-green algae (<i>Anabeana flos-aquae</i>)	Acute	5d EC50 5d NOAEC	40.1 20.2	µg/L µg/L	Growth	Acceptable	42520902 Hughes & Alexander 1992
Terrestrial	Avian Mallard duck (<i>Anas platyrhynchos</i>)	Acute oral	LD50	>4640	mg/kg	Practically non-toxic	Acceptable	00082966 Fink, Beavers, & Brown 1977
Terrestrial	Avian Northern bobwhite Quail (<i>Colinus virginianus</i>)	Subcute dietary	8d LC50	>5000	mg/kg diet	Practically non-toxic	Acceptable	40457502 Fletcher 1984
Terrestrial	Avian Mallard duck (<i>Anas platyrhynchos</i>)	Subacute dietary	LC50	42,766	mg/kg diet	Practically non-toxic	Acceptable	00070686 Beliles, Scott, & Knott 1965
Terrestrial	Avian Northern bobwhite Quail (<i>Colinus virginianus</i>)	Subacute dietary	LC50	18,184	mg/kg diet	Practically non-toxic	Supplemental	00070686 Beliles, Scott, & Knott 1965
Terrestrial	Avian Northern bobwhite Quail (<i>Colinus virginianus</i>)	Chronic	NOAEC	250	mg/kg diet	---	Invalid	41035902 Fletcher 1989
Terrestrial	Avian Mallard duck (<i>Anas platyrhynchos</i>)	Chronic	NOAEC	500	mg/kg diet	---	Acceptable	41035901 Fletcher & Pedersen 1989
Terrestrial	Avian Northern bobwhite Quail (<i>Colinus virginianus</i>)	Chronic	NOAEC	>600	mg/kg diet	---	Acceptable	44556801 Gallagher, Beavers, & Jaber 1998
Terrestrial	Rodent Rat	Acute oral	LD50	1802 (M) 2076 (F)	mg/kg bw	Category III	---	00060314 Kapp 1975
Terrestrial	Rodent Rat	Repro	NOAEC	10	mg/kg diet	---	---	41445101 Giknis & Yau 1990
Terrestrial	Invertebrate Honeybee (<i>Apis mellifera</i>)	Acute contact	LD50	>96.69	µg/bee	Relatively non- oxic	Acceptable	00036935 Atkins, Greywood, & Macdonald 1975
Terrestrial plants	Terrestrial dicot Cabbage (seedling emergence-Tier 2)	Acute	EC25 NOAEC [†]	0.02 0.008	lbs a.i./A lbs a.i./A	Dry Weight	Acceptable	41035904 Canez 1988

Terrestrial plants	Terrestrial monocot Oat (seedling emergence-Tier 2)	Acute	EC25 NOAEC [§]	0.049 0.011	lbs a.i./A lbs a.i./A	Dry Weight	Acceptable	41035904 Canez 1988
Terrestrial plants	Terrestrial dicot Lettuce (vegetative vigor-Tier 2)	Acute	EC25 NOAEC [§]	0.01 0.003	lbs a.i./A lbs a.i./A	Dry Weight	Acceptable	41035903 Canez 1988
Terrestrial plants	Terrestrial monocot Onion (vegetative vigor-Tier 2)	Acute	EC25 NOAEC	0.18 0.1	lbs a.i./A lbs a.i./A	Dry Weight	Acceptable	41035903 Canez 1988
* A mixture study using Primazine 80W (40% prometryn a.i.; 38% atrazine a.i.) ⁺ A formulation study using Caparol 80W (80% prometryn a.i.) [§] The original NOAEC is undefined; the NOAEC cited is the EC₀₅ [†] The original NOAEC $\geq$ EC₂₅ ; the NOAEC cited is the EC₀₅								