

Appendix G: Summary of Ecotoxicity Data for Phosmet Relevant to the California Tiger Salamander (CTS, *Ambystoma californiense*)

Assessment Endpoint	Species	Endpoint ¹	Concentration (mg a.i./L)	Classification, Reference (e.g., MRID)	Effects
Aquatic Endpoints					
Direct Toxicity to Aquatic-Phase CTS	Bluegill Sunfish (<i>Lepomis macrochirus</i>)	Acute 96-hr LC ₅₀	0.07	Acceptable 00063194	Mortality
	Rainbow Trout (<i>Oncorhynchus mykiss</i>)	Acute 96-hr LC ₅₀	0.23	Acceptable 00063194	Mortality
	Fathead Minnow (<i>Pimephales promelas</i>)	Acute 96-hr LC ₅₀	7.3	Acceptable 00063194	Mortality
	Channel Catfish (<i>Ictalurus punctatus</i>)	Acute 96-hr LC ₅₀	11.0	Acceptable 00063194	Mortality
	Rainbow Trout (<i>Oncorhynchus mykiss</i>)	Acute 24-hr LC ₅₀	0.75	Acceptable Julin and Sanders (1977)	Mortality
	Channel Catfish (<i>Ictalurus punctatus</i>)	Acute 24-hr LC ₅₀	13	Acceptable Julin and Sanders (1977)	Mortality
	Atlantic salmon (<i>Salmo salar</i>)	Subacute 21-day LC ₅₀ NOAEC LOAEC	0.008 < 0.00085 0.00085	Supplemental: Nonguideline species and endpoints 47988201 Nieves-Puigdoller (2007)	Mortality
	Bluegill Sunfish (<i>Lepomis macrochirus</i>)	Chronic NOAEC LOAEC	0.001 N/A	ACR Rainbow Trout	Reduction in growth
	Rainbow Trout (<i>Oncorhynchus mykiss</i>)	Chronic NOAEC LOAEC	0.0032 0.012	Acceptable 40938701	Reduction in growth

Assessment Endpoint	Species	Endpoint ¹	Concentration (mg a.i./L)	Classification, Reference (e.g., MRID)	Effects
Indirect Toxicity to Aquatic-Phase CTS via Toxicity to Freshwater Invertebrates (i.e. prey items)	Scud (<i>Gammarus fasciatus</i>)	Acute 96-hr EC ₅₀	0.002	Supplemental: Raw data not reported 00063193	Mortality
Indirect Toxicity to Aquatic-Phase CTS via Toxicity to Freshwater Invertebrates (i.e. prey items)	Waterflea (<i>Daphnia magna</i>)	Acute 96-hr EC ₅₀	0.006	Acceptable 4004602	Mortality
	Sowbug (<i>Asellus brevicaudus</i>)	Acute 48-hr EC ₅₀	0.1	Supplemental: Nonguideline species Julin and Sanders (1977)	Mortality
	Scud (<i>Gammarus fasciatus</i>)	Chronic NOAEC LOAEC	0.0003	ACR Waterflea	Reduced growth and number of offspring
	Waterflea (<i>Daphnia magna</i>)	Chronic NOAEC LOAEC	0.0008 0.001	Acceptable 40652801	Reduced number of offspring
Indirect Toxicity to Aquatic-Phase CTS via Toxicity to Aquatic Plants ²	NA	NA	NA	NA	NA
Terrestrial Endpoints					
Direct Toxicity to Terrestrial-Phase CTS Direct Toxicity to Terrestrial-Phase CTS	Mallard duck (<i>Anas platyrhynchos</i>)	Acute 24-hr LD ₅₀	>2000 mg/kg bw	Acceptable 00084460 Fink (1976)	Mortality
	Bobwhite Quail (<i>Colinus virginianus</i>)	Subacute 8-day LC ₅₀	501 mg/kg diet	Acceptable 00022923 Hill (1975)	Mortality

Assessment Endpoint	Species	Endpoint ¹	Concentration (mg a.i./L)	Classification, Reference (e.g., MRID)	Effects
	Ring-necked pheasant (<i>Phasianus colchicus</i>)	Subacute 8-day LC ₅₀	3,146 mg/kg diet	Acceptable 00022923 Hill (1975)	Mortality
Direct Toxicity to Terrestrial-Phase CTS Direct Toxicity to Terrestrial-Phase CTS	Mallard duck (<i>Anas platyrhynchos</i>)	Subacute 8-day LC ₅₀	>5,000 mg/kg diet	Acceptable 00022923 Hill (1975)	Mortality
	Mallard Duck (<i>Anas platyrhyncho</i>)	Chronic NOAEC LOAEC	60 mg/kg diet 150 mg/kg diet	Acceptable 00125786 00105999	Reduction in number of eggs and viable 14-day old chicks
	Bobwhite Quail (<i>Colinus virginianus</i>)	Chronic NOAEC LOAEC	60 mg/kg diet 150 mg/kg diet	Acceptable 00125786 00105999	Reduction in number of eggs and viable 14-day old chicks
Indirect Toxicity to Terrestrial-Phase CTS (via toxicity to mammalian prey items)	Laboratory Rat (<i>Rattus norvegicus</i>)	Acute 96-hr LD ₅₀	113 mg/kg bw	Acceptable 0046189	Mortality
	Laboratory Rat (<i>Rattus norvegicus</i>)	Chronic NOAEC LOAEC	1.5 mg/kg/day 6.1 mg/kg/day	Acceptable 41520001	Reductions in adult body weight, number of live pups per litter, and pup body weight
Indirect Toxicity to Terrestrial-Phase CTS (via toxicity to terrestrial invertebrate prey items)	Honey Bee (<i>Apis mellifera</i>)	Acute 48-hr LD ₅₀	1.1 µg/bee	Acceptable 00066220	Mortality
Indirect Effects to Terrestrial- and Aquatic-Phase CTS (via toxicity to terrestrial plants) ²	Monocots	NA	NA	NA	NA
	Dicots				

^{NA} Not available.