



CASE STUDY

TERMINAPHOS

Tier 2

BY TOXLEARN4EU

FUNDED BY ERASMUS+

Case study Terminaphos

Additional toxicity tests Tier 2

1 Arthropoda

2 Vertebrates

Latin name	Common name	Group	EC50	Duration
<i>Gammarus pulex</i>	Scud	1	0.12	3
<i>Americamysis bahia</i>	Mysid shrimp	1	0.13	4
<i>Cloeon dipterum</i>	Mayfly	1	0.30	5
<i>Daphnia longispina</i>	Water flea	1	0.38	4
<i>Chironomus tentans</i>	Midge	1	0.57	4
<i>Daphnia magna</i>	Water flea	1	1.00	2
<i>Chaoborus obscuripes</i>	Midge	1	1.34	4
<i>Asellus aquaticus</i>	Aquatic sowbug	1	3.40	3
<i>Pungitius pungitius</i>	Ninespine stickleback	2	31.06	2
<i>Oncorhynchus mykiss</i>	Rainbow trout	2	46.74	10
<i>Gasterosteus aculeatus</i>	Threespine stickleback	2	70.80	2
<i>Lepomis macrochirus</i>	Bluegill	2	113.13	11
<i>Pimephales promelas</i>	Fathead minnow	2	176.81	15
<i>Ictalurus punctatus</i>	Channel catfish	2	225.80	4

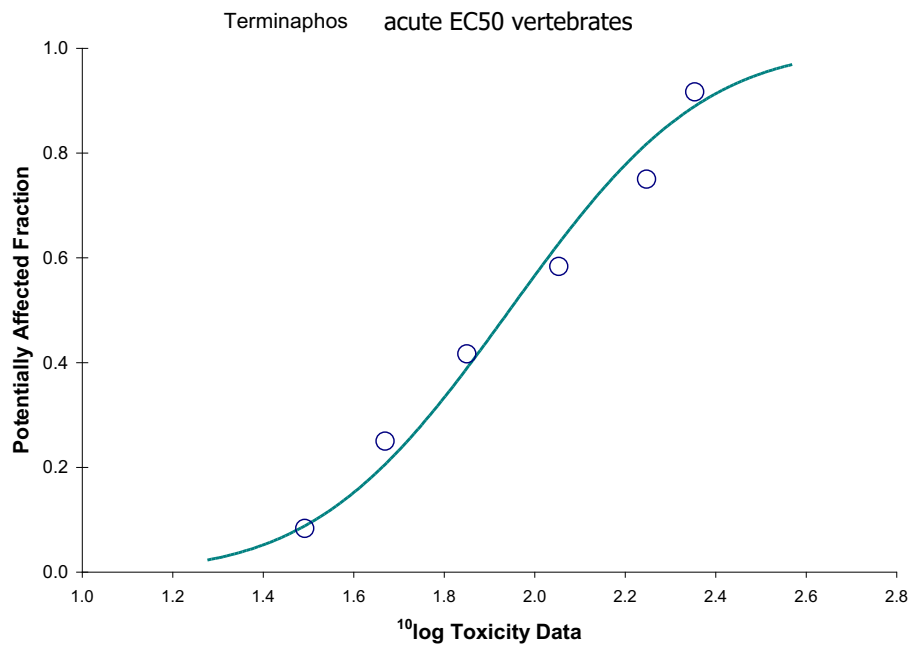
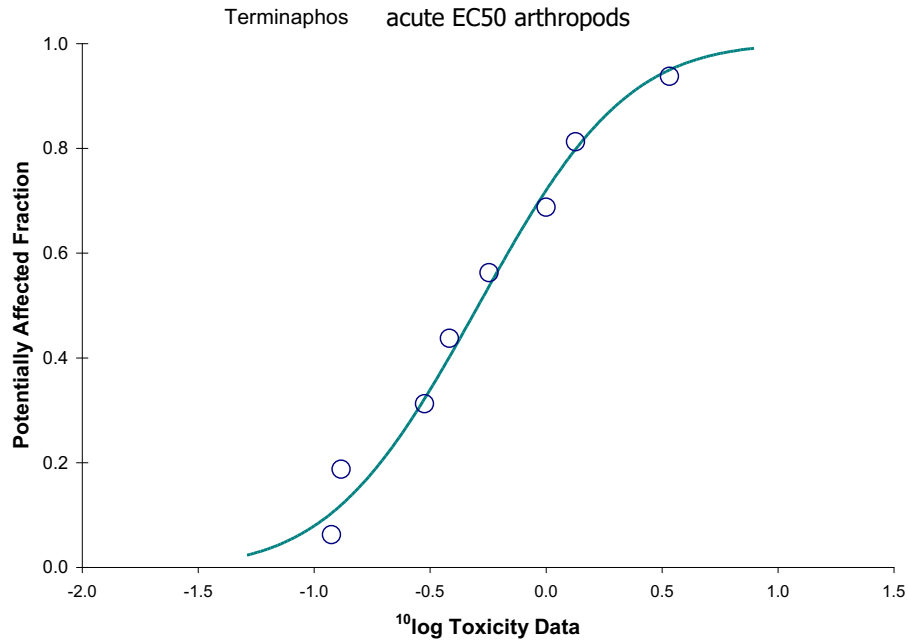


Table: HC5 calculations in $\mu\text{g/L}$

	Estimate	95%C.I.	
	HC5	Lower	Upper
Arthropoda	0.070	0.013	0.169
Vertebrates	22.83	5.05	44.84

All laboratory toxicity data

Terminaphos on Arthropods

Latin name	Common name	EC50 µg/L	Duration days
<i>Hyalella azteca</i>	Scud	0.04	4
<i>Ceriodaphnia dubia</i>	Water flea	0.07	14
<i>Rhepoxynius abronius</i>	Amphipod	0.10	3
<i>Gammarus pulex</i>	Scud	0.12	3
<i>Americamysis bahia</i>	Mysid shrimp	0.13	4
<i>Gammarus lacustris</i>	Scud	0.15	4
<i>Daphnia pulex</i>	Water flea	0.16	2
<i>Penaeus aztecus</i>	Brown shrimp	0.20	1
<i>Gammarus pseudolimnaeus</i>	Scud	0.22	3
<i>Ampelisca abdita</i>	Amphipod	0.28	3
<i>Cloeon dipterum</i>	Mayfly	0.30	5
<i>Gammarus fasciatus</i>	Scud	0.32	1
<i>Ephemerella</i> sp	Mayfly	0.36	2
<i>Daphnia longispina</i>	Water flea	0.38	4
<i>Simocephalus vetulus</i>	Water flea	0.50	4
<i>Culex pipiens molestus</i>	Mosquito	0.55	2
<i>Chironomus tentans</i>	Midge	0.57	4
<i>Caenis horaria</i>	Mayfly	0.59	2
<i>Palaemonetes pugio</i>	Daggerblade grass shrimp	0.64	5
Leptoceridae	Longhorn caddisfly family	0.82	2
<i>Pteronarcella badia</i>	Stonefly	0.83	2
<i>Claassenia sabulosa</i>	Stonefly	0.84	3
<i>Peltodytes</i> sp	Beetle	0.85	2
<i>Daphnia magna</i>	Water flea	1.00	2
<i>Chaoborus obscuripes</i>	Midge	1.3	4
Copepoda	Copepod subclass	1.4	2
<i>Neoplea striola</i>	Pygmy backswimmer	1.9	6
<i>Procambarus acutus acutus</i>	White river crayfish	2.0	1
<i>Penaeus duorarum</i>	Northern pink shrimp	2.4	1
<i>Corixa punctata</i>	Water boatman	2.6	5
<i>Asellus aquaticus</i>	Aquatic sowbug	3.4	3
<i>Penaeus vannamei</i>	Whiteleg shrimp	4.8	1
<i>Callinectes sapidus</i>	Blue crab	5.2	1
<i>Orconectes immunis</i>	Crayfish	6.0	1
<i>Pteronarcys californica</i>	Stonefly	12	3
<i>Procambarus clarki</i>	Red swamp crayfish	22	3
<i>Ozotelphusa senex senex</i>	Crab	443	10

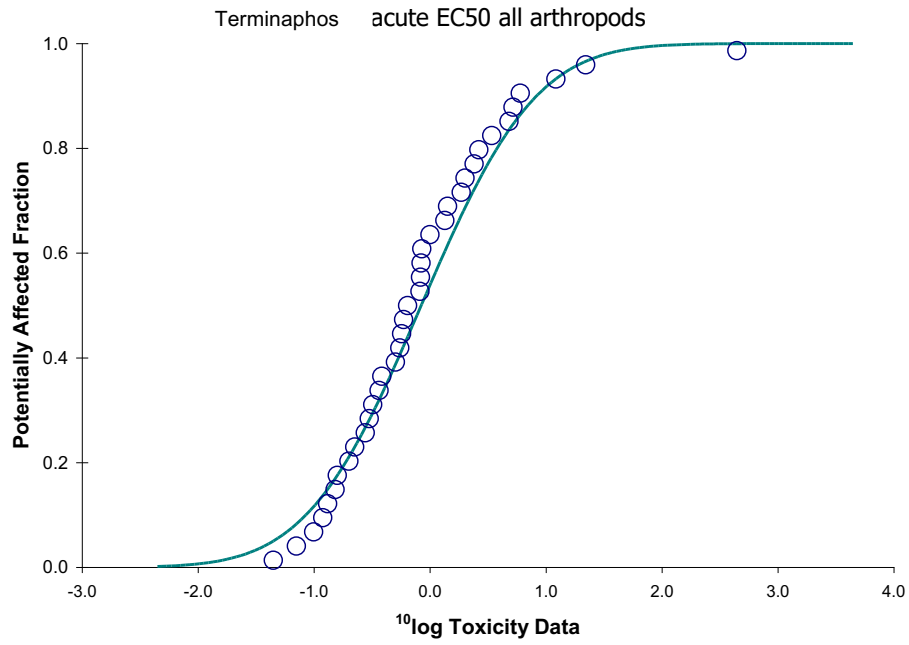


Table: HC5 calculations in $\mu\text{g/L}$

	Estimate	95%C.I.	
		Lower	Upper
Arthropoda	0.043	0.008	0.084