

Chemical: Triphenyl Phosphate

CASRN: 115-86-6

Version: Draft, July 2012

Aquatic Toxicity

PROPERTY/ENDPOINT	DATA	REFERENCE	DATA QUALITY
Acute Toxicity	VERY HIGH: Based on experimental fish 96-hour LC ₅₀ values of 0.4 and 0.85 mg/L.		
Fish LC ₅₀	Fish 96-hour LC ₅₀ = 0.4 mg/L (Experimental)	OECD SIDS, 2002	Reported in a secondary source.
	Fish 96-hour LC ₅₀ = 0.85 mg/L (Experimental)	OECD SIDS, 2002	Reported in a secondary source. Guideline study.
	Fish 96-hour LC ₅₀ = 1.47 mg/L (Estimated) ECOSAR: Esters	EPI	
	Fish 96-hour LC ₅₀ = 1.24 mg/L (Estimated) ECOSAR: Esters (phosphate)	EPI	
	Fish 96-hour LC ₅₀ = 1.62 mg/L (Estimated) ECOSAR: Neutral organics	EPI	

PROPERTY/ENDPOINT	DATA	REFERENCE	DATA QUALITY
Daphnid LC₅₀	Daphnid 48-hour LC ₅₀ = 1.28 mg/L (Experimental)	FMC Industrial Chemical Division, 1979	Sufficient study details reported.
	Daphnid 48-hour LC ₅₀ = 2.16 mg/L (Estimated) ECOSAR: Esters	EPI	No Effects at Saturation (NES): The LC ₅₀ value exceeds the water solubility (1.9 mg/L); NES are predicted for these endpoints.
	Daphnid 48-hour LC ₅₀ = 1.98 mg/L (Estimated) ECOSAR: Esters (phosphate)	EPI	NES: The LC ₅₀ value exceeds the water solubility (1.9 mg/L); NES are predicted for these endpoints.
	Daphnid 48-hour LC ₅₀ = 1.28 mg/L (Estimated) ECOSAR: Neutral organics	EPI	
	Daphnid 48-hour LC ₅₀ = 1,000 µg/L (Experimental)	Mayer et al., 1981	Sufficient study details reported.
Other Freshwater Invertebrate LC₅₀	<i>Mysidopsis bahia</i> 96-hour LC ₅₀ > 0.18 - 0.32 mg/L (Experimental)	OECD SIDS, 2002	Reported in a secondary source.
Green Algae EC₅₀	Green algae 96-h EC ₅₀ = 2.0 mg/L (Experimental)	OECD SIDS, 2002	Reported in a secondary source.
	Green algae 96-h EC ₅₀ = 2.0 mg/L (Experimental)	Mayer et al., 1981	Sufficient study details reported
	Green algae 96-hour EC ₅₀ = 0.70 mg/L (Estimated) ECOSAR: Esters	EPI	
	Green algae 96-hour EC ₅₀ = 2.71 mg/L (Estimated) ECOSAR: Esters (phosphate)	EPI	NES: The LC ₅₀ value exceeds the water solubility (1.9 mg/L); NES are predicted for these endpoints.
	Green algae 96-hour EC ₅₀ = 1.59 mg/L (Estimated) ECOSAR: Neutral organics	EPI	

EPI (EPIWIN/EPISUITE) Estimations Programs Interface for Windows, Version 4.0. U.S. Environmental Protection Agency: Washington D.C. <http://www.epa.gov/opptintr/exposure/>.

FMC Industrial Chemical Division. Acute aquatic toxicity of triphenyl phosphate. ICG/T-79-064. **1979.**

Mayer, F; Adams, W; Finley, M; et al. Phosphate ester hydraulic fluids: An aquatic environmental assessment of pydrauls 50E and 115E. Aquatic Toxicology and Hazard Assessment: Fourth Conference, ASTM STP 737, Branson, D and K. Dickinson, Eds. American Society for Testing and Materials, p103-123. **1981.**

OECD SIDS (Organisation for Economic Cooperation and Development Screening Information Dataset). 2002. SIDS Initial Assessment Report for Triphenyl Phosphate. <http://www.chem.unep.ch/irptc/sids/OECDSIDS/115866.pdf>

