Results of Testing

Chemical Name	CAS No.	Study Code/Type	Protocol/Guideline	Species	Exposure	Dose/Concentration	No. per Group	Results	Reference
Tetrabromo-bisphenol A	79-94-7	EEATOX Algae acute toxicity	Non-TSCA Protocol/Guideline (docket OPTS-42083A)	*Chlorella sp.* (green alga)	6 algal growth media; 96 hrs	1.5 mg/L (estimated saturation concentration)	Not applicable	The test material did not inhibit growth by as much as 50% in any growth medium.	53 FR 49227; 12/6/88 OTS0525468
Tetrabromo-bisphenol A	79-94-7	EEATOX Acute fish toxicity	40 CFR 797.1400 (modified)	fathead minnow	flow-through; 144 hrs	0.19, 0.26, 0.32, 0.45, 0.63 mg/L	20 (10/replicate)	Total mortality was observed at the high dose level. The 96-hour LC_{50} value was 0.54 mg/L, and the 144-hour LC_{50} was 0.49 mg/L. No effects were observed at 0.26 mg/L.	53 FR 49227; 12/6/88 OTS0525512
Tetrabromo-bisphenol A	79-94-7	EEATOX Chironomid sediment toxicity	Non-TSCA Protocol/Guideline (docket OPTS-42083A)	*Chironomus tentans* (midge)	flow-through in 3 sediment types (high, medium, and low organic carbon); 14 days	0, 13, 25, 50, 100, 200 (nominal)	50 (25/replicate)	Survival in all treated sediments ranged from 44 to 96% after 14 days of exposure. No effects were noted on growth (wet weight). The highest no-effect levels for high, medium, and low organic carbon sediments were, 0.046, 0.045, and 0.039 mg/L, respectively.	54 FR 38436; 9/18/89 OTS0525519
Tetrabromo-bisphenol A	79-94-7	EEATOX Acute oyster toxicity	40 CFR 797.1800	*Crassostrea virginica* (eastern oysters)	flow-through; 96 hrs	0, 75, 100, 160, 260, 310 µg/L	40 (20/replicate)	The 96-hour EC_{50} based on decreased shell growth (and 95% confidence limits) were 98 (20-210) µg/L. The no effect concentration was <18 µg/L.	54 FR 28837; 7/10/89 OTS0525515
Tetrabromo-bisphenol A	79-94-7	EEBIOC Mollusk bioconcentration	40 CFR 797.1830	*Crassostrea virginica* (eastern oysters)	flow-through; 20 dayy	1.0 µg/L (nominal)	60	The concentration of ^{14}C-residues reached steady state by day 5. The bioconcentration factor was 720X. Half-life of ^{14}C-residues occurred between days 3 and 5 of depuration.	54 FR 28837; 7/10/89 OTS0525518
Tetrabromo-bisphenol A	79-94-7	EEBIOC Fish Bioconcentration study	40 CFR 797.1520	fathead minnow	flow-through; 24 days	0, 5.0 µgL	91/group	Steady state was reached on day 4 of exposure. The mean steady-state tissue concentration was 5800 µg/kg, which established a BCF of 1200X. Half-life of the ^{14}C-residues occurred during the first 24 hours of depuration.	54 FR 14861; 4/13/89 OTS0525518
Tetrabromo-bisphenol A	79-94-7	EEBIOC Fish Bioconcentration study (amended report)	40 CFR 797.1520	fathead minnow	flow-through; 24 days	0, 5.0 µgL	91/group	Results of this study indicate that steady-state was reached on day 4 of exposure. The mean steady-state tissue concentration was 5800 ug/kg which established a BCF of 1200X. Half-life of the 14C-residues observed during depuration occurred during the first 24 hours; 98% of the accumulated residues were eliminated within 6 days.	8/89 OTS0525518
Tetrabromo-bisphenol A	79-94-7	EECLIF Fish early life stage study	40 CFR 797.1600 (modified)	fathead minnow	flow-through; 35 days	0.024, 0.040, 0.084, 0.16, 0.31 mg/L (mean measured)	120 embryos (60/replicate)	Based on significant adverse effects ($p \leq 0.05$) on embryo survival and larval survival, the MATC was >0.16 and <0.31 mg/L.	54 FR 38436; 9/18/89 OTS0525518
Tetrabromo-bisphenol A	79-94-7	EECTOX Chronic invertebrate toxicity	40 CFR 797.1330	*Daphnia magna*	flow-through; 21 days	0.056, 0.10, 0.19, 0.30, 0.98 mg/L	40 (20/replicate)	Reproduction was the most sensitive indicator of toxicity. No effects were noted at ≤0.30 mg/L. The maximum acceptable toxicant concentration (MATC) was >0.30 mg/L and <0.98 mg/L.	54 FR 38436; 9/18/89 OTS0525517

Chemical Name	CAS No.	Study Code/Type	Protocol/Guideline	Species	Exposure	Dose/Concentration	No. per Group	Results	Reference
Tetrabromo-bisphenol A	79-94-7	EFBDEG Microcosm biodegradation (Eco Core)	Non-TSCA Protocol/Guideline (docket OPTS-42083A)	Not applicable	aerobic sediment/ water microbial test system (natural core chambers), 56 days	10, 100, 1000 µg/L	Not applicable	Biodegradation occurred in all tested concentrations as determined by HPLC with radiometric detection. Half-lives ranged between 48 and 84 days with a correlation between half-life and TBBPA concentration and microbial population. Less that 8% of applied radioactivity was recovered as CO_2. Filtered water contained less than 5% of applied radioactivity. At test termination, 44.7%, 64.2% and 60.8% at 10, 100 and 1000 µg/L treatment levels, respectively.	54 FR 38436; 9/18/89, Docket OPPTS-44537
Tetrabromo-bisphenol A	79-94-7	EFBDEG Biodegradation study	40 CFR 796.3400	Not applicable	aerobic soil (sandy loam, clay loam, silty loam); 64 days in biometer flasks at 21.5 °C.	0.5 mg/100 µL	Not applicable	The amounts of parent compound remaining in the soil after 64 days for sandy, clay, and silty loam were 74.3 to 81.9%, 41.1 to 43.2%, and 35.9, to 40.1%, respectively. For all soil types, 6.0% or less of the applied radioactivity was recovered in the CO_2 traps, suggesting only partial biodegradation (products were not identified in report).	54 FR 8816; 3/2/89 OTS0525513
Tetrabromo-bisphenol A	79-94-7	EFBDEG Biodegradation study	40 CFR 796.3400	Not applicable	anaerobic soil (sandy loam, clay loam, silty loam); 64 days	0.5 mg/100 µL	Not applicable	The amounts of parent compound remaining in the soil after 64 days for sandy loam, clay loam, and silty loam were 43.7 to 57.0%, 89.5 to 90.6%, and 53.4 to 65.0%, respectively, as determined by TLC analysis. For all soil types, 0.5% or less of the applied radioactivity was recovered in the CO_2 traps, indicating an incomplete conversion to CO_2 and/or other volatile products. Based on the results obtained, TBBPA is suseptible to biodegradation in soils under aerobic conditions under the conditions and procedures employed in the study.	54 FR 8816; 3/2/89 OTS0525513