

Toxicity Values for the TEACH Chemical Summary

Chemical Name: PCB

Tox Value	Link	Date Last Revised	Value	Critical Effect(s)	Children's Studies?	Uncertainty Factors and Other Info
RfD	www.epa.gov/iris/subst/0462.htm	11/01/1996	Aroclar 1016: 7E-5 mg/kg-day	Reduced birth weight	Primary study-perinatal exposure to monkeys	UF= 100: 3 for monkey to human, 3 for sensitive individuals, 3 for database limitations, and 3 for subchronic to chronic; MF=1.
	www.epa.gov/iris/subst/0649.htm	11/01/1996	Aroclar 1248: Data on health effects inadequate for a verifiable RfD		None	Derivation of an oral RfD for Aroclar 1248 is not recommended because a Frank Effect (death of an infant) was noted at the lowest dose tested in a sensitive animal species, rhesus monkeys (<i>Macaca mulatta</i>).
	www.epa.gov/iris/subst/0389.htm	11/01/1996	Aroclar 1254: 2E-5 mg/kg-day	Ocular exudate, inflamed and prominent Meibomian glands, distorted growth of finger and toe nails; decreased antibody (IgG and IgM) response to sheep erythrocytes	None	UF= 300: 10 for sensitive individuals, 3 for monkey to human, 3 for subchronic to chronic, and 3 for using minimal LOAEL; MF=1
RfC	www.epa.gov/iris/subst/0294.htm	N/A				
Cancer Oral Slope Factor	www.epa.gov/iris/subst/0294.htm	06/01/1997	<p><u>High Risk</u> UB*: 2.0 mg/kg/day CE#: 1.0 mg/kg/day</p> <p><u>Low Risk</u> UB: 0.4 mg/kg/day CE: 0.3 mg/kg/day</p> <p><u>Lowest Risk</u> UB: 0.07 mg/kg/day CE: 0.04 mg/kg/day</p>	Liver tumors	One supporting rat weanling study	<p>Cancer classification: B2; probable human carcinogen.</p> <p>The cancer potency of PCB mixtures is determined using a tiered approach that depends on the information available.</p>
Cancer Inhalation Unit Risk	www.epa.gov/iris/subst/0294.htm	06/01/1997	N/A			

Drinking Water Concentrations at Specified Risk Levels	www.epa.gov/iris/subst/0294.htm	06/01/1997	$\frac{1 \text{ in } 10,000}{10 \text{ g/L}}$ $\frac{1 \text{ in } 100,000}{1 \text{ g/L}}$ $\frac{1 \text{ in } 1,000,000}{0.1 \text{ g/L}}$			
Air Concentrations at Specified Risk Levels	www.epa.gov/iris/subst/0294.htm	06/01/1997	$\frac{1 \text{ in } 10,000}{1 \text{ g/cu.m}}$ $\frac{1 \text{ in } 100,000}{0.1 \text{ g/cu.m}}$ $\frac{1 \text{ in } 1,000,000}{0.01 \text{ g/cu.m}}$			
MRL (Aroclor 1254 only)	www.atsdr.cdc.gov/mrls.html	11/00	Oral Intermediate = 0.03 g/kg/day	Neurological		Factor = 300
			Oral Chronic = 0.02 g/kg/day	Immunological		Factor = 300
MCL (drinking water)	www.epa.gov/safewater/mcl.html#mcls	July 2002	0.0005 mg/L	Skin changes; thymus gland problems; immune deficiencies; reproductive or nervous system difficulties; increased risk of cancer		Sources: Runoff from landfills; discharge of waste chemicals
MCLG (drinking water)	same as MCL	July 2002	Zero			
Drinking Water Advisories (10-kg child)	www.epa.gov/ost/drinking/standards/dwstandards.pdf	N/A				

*Upper Bound slope factor

#Central Estimate slope factor