

Table 6-1. Summary of noncancer oral toxicity values (mg/kg-day)

Fractions		TPHCWG (1997c) ^a		MA DEP (2003) ^b		USEPA PPRTV (2009a) ^c		TCEQ PCL (2010) ^d						
Primary	Secondary	RfD ^f mg/kg-d	Surrogate (s) or Component (c)	RfD mg/kg-d	Surrogate (s) or Component (c)	RfD mg/kg-d	Surrogate (s) or Component (c)	RfD mg/kg-d	Surrogate (s) or Component (c)					
Aliphatics	Low Carbon Range (C5-C8; EC5-EC8)	5	(s) Commercial hexane, where n-hexane is ≤53%.	0.04	(s) n-hexane	0.3 (subchronic)	(s) n-hexane	0.06	(s) n-hexane					
	Medium Carbon Range (C9-C18; EC>8-EC16)	0.1	(s) Mid-range aliphatic hydrocarbon streams	0.1	(s) Mid-range aliphatic hydrocarbon streams	0.01	(s) Mid-range aliphatic hydrocarbon streams	0.1	(s) C9-C17 aliphatics					
	High Carbon Range (C19-C32; EC>16-EC35)	2	(s) White mineral oils	2	(s) White mineral oils	3	(s) White mineral oil	2.0 1.6	(s) white mineral oils (s) transformer mineral oil ^e					
Aromatics	Low Carbon Range (C6-C8; EC6-EC<9)	0.2	(s) Toluene	NA	(c) benzene	0.004	(c) benzene	0.1	(s) ethylbenzene					
				0.2	(c) toluene	0.08	(c) toluene							
				0.1	(c) ethylbenzene	0.1	(c) ethylbenzene							
				2	(c) xylenes	0.2	(c) xylenes							
				0.2	(c) styrene									
	Medium Carbon Range (C9-C16; EC9-EC<22)	0.04	(s) Naphthalenes / methylnaphthalenes	0.03	(s) Pyrene, with (c) naphthalene and 2- methylnaphthalene analyzed separately	0.03	(s) High-flash aromatic naphtha	0.04	(s) multiple aromatic compounds					
						2.0E-02	(c) Naphthalene							
						4.0E-03	(c) 2-methylnaphthalene							
						High Carbon Range (C17-C32; EC22-EC35)	0.03	(s) Pyrene	0.03	(s) Pyrene, with (c) naphthalene and 2- methylnaphthalene analyzed separately	0.04	(s) Fluoranthene	0.03	(s) pyrene
												(c) Benzo[a]pyrene and six other Group B2 PAHs		

NA = not available

^a Total Petroleum Hydrocarbon Criteria Working Group (TPHCWG) used the middle carbon range C>8-C16 (rather than EC>8-EC16), which corresponds to EC9-EC<22 and the high carbon range C>16-C35.

^b Massachusetts Department of Environmental Protection (MA DEP) combines the aromatic medium and high carbon ranges (C9-C32).

^c United States Environmental Protection Agency (USEPA) Provisional Peer-Reviewed Toxicity Values (PPRTV) for Complex Mixtures of Aliphatic and Aromatic Hydrocarbons (2009a).

^d Texas Commission on Environmental Quality (TCEQ)'s Protective Concentration Levels (PCLs) used the medium carbon range of C>8-C16 and the high carbon range of C>16-C35.

^e For transformer mineral oil releases only.

^f Reference Dose