

Benzo[a]pyrene - Toxicological and Physiochemical Data for SNIFFER

Parameter	Data in units from original source	Original Source	Calculation for Use in the SNIFFER model	Value for input into the SNIFFER model
CASRN	50-32-8	Fate and Transport of Selected Contaminants in the Soil Environment. EA Technical Publication P5-079/TR1	-	50-32-8
TDI oral	Non-threshold	R&D Publication Tox 2 DEFRA/EA (2002)	N/A	None
TDI dermal	Non-threshold		N/A	None
TDI inhalation	Non-threshold		N/A	None
Index Dose (ID) oral	0.02 ug/kg.bw/day		Divide by 1000 to convert to mg	2E-5 mg/kg.bw/day
Index Dose (ID) inhalation	0.07 x 10 ⁻³ ug/kg.bw/day		Divide by 1000 to convert to mg	7E-8 mg/kg.bw/day
Dietary Exposure	Non-threshold			None
Exposure to drinking water	Non-threshold			None
Adult MDI oral	Non-threshold		-	None
Adult MDI inhalation	Non-threshold		-	None
Henry's Law Constant (dimensionless)	1.86E-5		Fate and Transport of Selected Contaminants in the Soil Environment. EA Technical Publication P5-079/TR1	-
Air diffusion coefficient	4.30E-06 m ² .s ⁻¹	-		4.30E-06 m ² .s ⁻¹
Water diffusion coefficient	9.00E-10 m ² .s ⁻¹	-		9.00E-10 m ² .s ⁻¹
Vapour pressure	2.13E-5 Pa	Divide by 133.32 to convert to mmHg		1.60E-7 mmHg
Aqueous solubility	0.0038 mg/L	-		0.0038 mg/L
Koc log	6.01 L kg ⁻¹ (log)	6.01 to 10 ^{6.01}		1023293 L kg ⁻¹
Kow log	6.04 dimensionless (log)	6.04 to 10 ^{6.04}		1096478
Relative molecular weight	252.32 g.mol ⁻¹	-		252.32 g.mol ⁻¹