

Physicochemical compound properties

	Mr	C <sub>s</sub>	P <sub>s</sub>	Log K <sub>ow</sub>	T <sub>0.5</sub> air	T <sub>0.5</sub> soil
	g mol <sup>-1</sup>	g m <sup>-3</sup>	Pa		h	h
acenaphthylene	150.2	16.1	0.9	4.000	55	5500
acenaphthene	154.2	3.8	0.3	3.920	55	5500
fluorene	166.2	1.9	0.09	4.180	55	5500
phenanthrene	178.2	1.1	0.02	4.570	55	5500
anthracene	178.2	0.045	0.001	4.540	55	5500
fluoranthene	202.3	0.26	0.00123	5.220	170	17000
pyrene	202.3	0.132	0.0006	5.180	170	17000
benzo[a]anthracene	228.3	0.011	2.80E-05	5.910	170	17000
chrysene	228.3	0.002	5.70E-07	5.860	170	17000
benzo[b]fluoranthene	252.3	0.0015	5.00E-07	5.800	55	17000
benzo[k]fluoranthene	252.3	0.0008	5.20E-08	6.000	170	17000
benzo[a]pyrene	252.3	0.0038	7.00E-07	6.040	170	17000
dibenzo[ah]anthracene	278.4	0.0006	3.70E-10	6.750	170	17000
benzo[ghi]perylene	268.4	0.00026	7.24E-08	6.500	170	17000

$M_r$  – molecular weight,  $C_s$  – water solubility,  $p_s$  – solid phase saturated vapour pressure,  $K_{ow}$  – octanol-water partitioning coefficient,  $T_{0.5}$  – half-life

Reference:

D. Mackay, W. Y. Shiu and K. C. Ma, *Illustrated handbook of physical-chemical properties and environmental fate for organic chemicals*. 1992, Lewis: Boca Raton, FL