

**Table 1.** Persistence of some commonly used pesticides in the atmosphere, surface water, soil, and aquatic sediments.

Use class	Chemical class	Example(s)	Suggested half-life class in			
			Atmosphere	Surface water	Soil	Aquatic sediment
Herbicides	Acetanilides	Metolachlor	4	6	6	7
	Amino acid derivatives	Glyphoate	4	6	6	7
	Chlorophenoxy acids	2,4-D	2	3	5	6
		2,4,5-T	2	5	5	6
	Dinitroanilines	Isopropalin	2	5	6	7
		Trifluralin	4	6	6	7
	Triazines	Atrazine	1	8	6	6
		Simazine	3	5	6	7
	Ureas	Diuron	2	5	6	7
		Linuron	2	5	6	7
Insecticides	Carbamates	Aldicarb	1	5	6	8
		Carbaryl	3	4	5	6
		Carbofuran	1	4	5	6
	Organochlorines	Chlordane	3	8	8	9
		<i>p,p</i> -DDT	4	7	8	9
		Lindane	4	8	8	9
	Organophosphates	Chlorpyrifos	2	4	4	6
		Diazinon	5	6	6	7
Malathion		2	3	3	5	
Fumigants	Organochlorines	Chloropicrin	4	3	3	4
Fungicides	Imides	Captan	2	2	5	5
	Organochlorines	Chlorothalonil	4	4	5	6
<i>Half-life class definitions</i>						
<i>Class</i>	<i>Mean half-life</i>	<i>Range (h)</i>				
1	5 h	< 10				
2	~ 1 day	10–30				
3	~ 2 days	30–100				
4	~ 1 week	100–300				
5	~ 3 weeks	300–1,000				
6	~ 2 months	1,000–3,000				
7	~ 8 months	3,000–10,000				
8	~ 2 years	10,000–30,000				
9	~ 6 years	> 30,000				

Source: Mackay et al. (1997).

Mackay D., Shiu W.-Y., and Ma K.-C. (1997) Illustrated Handbook of Physical–Chemical Properties and Environmental Fate for Organic Chemicals, Volume V. Pesticide Chemicals. Lewis Publishers, New York, 812pp.