

The Half life of Commonly used Chemicals through Alkaline Hydrolysis

INSECTICIDES			
Trade Name	Chemical / Technical Name	pH	Half Life
Bt	Bacillus Thuringiensis		Incompatible with Alkaline Solutions
Comite	Propargite	9	24 Hours
		6	331 Days
Profenn / Curacron	Profenofos		Incompatible with Alkaline Solutions
Decis	Decis	8	24 Hours
			More stable under acidic conditions
Endosulfan	Endosulfan		Undergoes some Hydrolysis
Folimat	Omethoate		Incompatible with Alkaline solutions
Mitfol, Kelthane	Dicofol	7	15 Minutes
		6	Optimum
		5	21 Days
Showdown, Larvin	Thiodicarb	6	Stable
Rogor, Dimethoate	Dimethoate	9	48 minutes
		6	12 hours
		4	21 hours
Lorsban, Instinct, Predator	Chlorpyrifos	10	7 Days
		6	Stable
Folidol, Parathion	Parathion Methyl	10	6.5 Hours
		7	28 Days
		5	160 Days
HERBICIDES			
Arsenal	Imazpyr	7	Stable
			Unstable Under Alkaline Conditions
Atrazine	Atrazine	7	Stable
Glyphosate	Glyphosate		3.5 Optimum pH
Goal	Oxyfluorfen	7	Stable
Reglone	Diquat	7	Decomposes Rapidly in High pH
Simazine	Simazine	7	Stable Decomposes Rapidly in High pH
Spray Seed	Paraquat	7	Stable Decomposes Rapidly in High pH
GROWTH REGULATORS			
Prep, Ethephon	Ethephon	3	Decomposes Rapidly in Alkaline Conditions