

Comparison of Various Oxidizing Potentials

Oxidizing Agent	Electrochemical Oxidation Potential, (EOP)V	EOP Relative to Chlorine
Fluorine	3.06	2.25
Hydroxyl Radical	2.80	2.05
Oxygen (Atomic)	2.42	1.78
Ozone	2.08	1.52
Hydrogen Peroxide	1.78	1.30
Hypochlorite	1.49	1.10
Chlorine	1.36	1.00
Chlorine Dioxide	1.27	0.93
Oxygen (Molecular)	1.23	0.90

Definition of Advanced Oxidation Process

Advanced oxidation processes (AOPs), which involve in situ generation of highly potential oxidants such as the hydroxyl radical (OH•) have recently emerged as an important class of technologies for accelerating the oxidation and hence destruction of a wide range of organic contaminants in polluted water, air, on surfaces and in substrates.