

Electrophilic Aromatic Substitution

Relative Rates of Bromination

Part 1

Substrate	Rate at 0 °C (s)	Rate at Room Temp (s)	Rate at 55 °C
Phenol	instant	-	-
Anisole	20	-	-
Diphenyl ether	NR	NR	10 min
Phenyl Acetate	NR	NR	NR

NR = No Reaction

Part 2

Pair	Fastest
Phenol/Aniline	Amine
Anisole/N-methylaniline	Amine
Diphenyl ether/Dipheyl Amine	Amine
Phenyl Acetate/Acetanilide	Amine