

PRIMROSE SCHOOL
Class: XII CHEMISTRY
Phenol – Naming reaction

Naming Reactions

S.No.	Name of the reaction	Reactants	Reagents	Condition	Product
1.	Schotten Baumann Reaction	Phenol	Benzoyl chloride	NaOH	Phenyl benzoate
2.	Friedel Crafts alkylation	Phenol	CH ₃ Cl	Anhydrous AlCl ₃	O and p-cresol (Major : 1 hydroxy-4-methylbenzene)
3.	Friedel Crafts acylation	Phenol	CH ₃ COCl	Anhydrous AlCl ₃	p-acetyl phenol (Major)
4.	Kolbes Schmidt reaction	Sodium salt of phenol	CO ₂	400 k/ 6-7 atm Rearrangement, hydrolysis	Salicylic acid 2-hydroxy benzoic acid.
5.	Reimer Teiman reaction	Phenol	CHCl ₃	NaOH	Salicylaldehyde, o-hydroxy benzaldehyde
6.	Coupling	Benzene diazonium chloride	Phenol	Alkali medium	p-hydroxyazobenzene
7.	Gattermann reaction (phenol)	Phenol	HCN/HCl	ZnCl ₂	Salicylaldehyde, O-hydroxy benzaldehyde (Only)
8.	Lederer-Manasse reaction	Phenol	Formaldehyde	NaOH	O and p-hydroxybenzylalcohol (major)
9.	Libermann's Test	Phenol	HONO	NaNO ₂ /H ₂ SO ₄	Quinone Monoxime
		Phenol	Quinone Monoxime	H ₂ SO ₄ NaOH	Indophenols- red Sodium salt of Indophenol –deep blue
10.	Fries Rearrangement	Phenol	Acetic anhydride	Heating	O and p hydroxyl acetophenone