

Generic Organic Synthesis process	Specific type process	Generic Organic Synthesis process	Specific type process
<b>Acetylation</b>	Acetylchloride, acetic anhydride.	<b>Formylation</b>	Phosphorous Oxychloride.
<b>Acylation</b>	O-Acylation, N-Acylation, Sulfonylation, Friedel-Crafts Acylation.	<b>Halogenation</b>	Aromatic and Aliphatic Bromination and Chlorinations Acyl Halide formations.
<b>Acid Chloride Handling</b>	Acetyl Chloride.	<b>Heterocyclic Ring Closure</b>	Hantsch 1,4 Dihydropyridines Synthesis, Fischer Indole synthesis.
<b>Aldo Condensation</b>	Benzaldehyde.	<b>Hydrogenation</b>	Hydrogen, Catalyst, Reductive Amination. Ethylamine.
<b>Alkylation</b>	N-Alkylation, O-Alkylation, S-Alkylation, Eschweiler-Clarke react.	<b>Hydrolysis</b>	Ester hydrolysis, Amide hydrolysis.
<b>Amination</b>	Delépine reaction, Reductive Amination.	<b>Iodination</b>	Iodine, Sodium Iodine.
<b>Aromatic Substitution</b>	Aromatic halogenation.	<b>Leuckart reaction</b>	Ammonium formate.
<b>Bromination</b>	Bromine.	<b>Mannich Reaction</b>	Paraformaldehyde.
<b>Carbamoylation</b>	Amines and Carbamoyl Chloride Derivatives.	<b>Metal Hydride Reductions</b>	Sodium Aluminium Hydride, Sodium Borohydride.
<b>Carboxylation</b>	Carbon dioxide.	<b>Nitration</b>	Nitric Acid and Sulphuric Acid Mixture.
<b>Chloromethylation</b>	Formaldehyde and Hydrogen chloride.	<b>Nitrogen Heterocyclics</b>	Indoles, Pyridines, 1,4-Dihydropyridines.
<b>Chlorosulfonation</b>	Chlorosulfonic acid.	<b>Oxidation</b>	Aromatization, Dehydrogenation.
<b>Chlorination</b>	Chlorine gas, Phosphorous Oxychloride etc.	<b>Phase Transfer Catalysis</b>	Benzyl Triethylammonium chloride.
<b>Cyclization</b>	Hantsch 1,4 Dihydropyridines Synthesis, Fischer indole synthesis.	<b>Pirrole Chemistry</b>	Heterocyclic Substitution.
<b>Decarboxylation</b>	Sulfuric Acid.	<b>Rearrangement</b>	Baker-Ventakaraman rearrangement, Fries rearrangement Schleyer adamantization.
<b>Dehydration</b>	Sulfuric Acid, Double-bond formation.	<b>Reduction</b>	Low pressure Hydrogenations.
<b>Delepine Reaction</b>	Hexamethylene tetramine.	<b>Reductive amination</b>	Ketones and Aldehydes.
<b>Diels-Alder reaction</b>	Maleic anhydre.	<b>Transesterification</b>	Methyl Esters and Higher Alcohols.
<b>Elimination</b>	Dehydration, Aromatization.	<b>Saponification</b>	Sodium Hydroxide.
<b>Esterification</b>	Alcohol and Carboxylic Acid.	<b>Sulfur Chemistry</b>	Thiol formation. Sulfoxide Formation.
<b>Etherification</b>	Alkoxide or Aroxide and Alkyl Halide.	<b>Vilsmeier-Haack Acylation</b>	Phosphorous oxychloride.
<b>Freidel Crafts reactions</b>	Aluminium Trichloride.	<b>Wittig Reaction</b>	Triphenylphosphine.