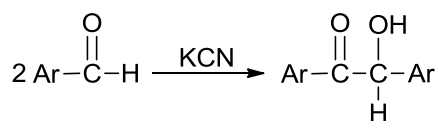


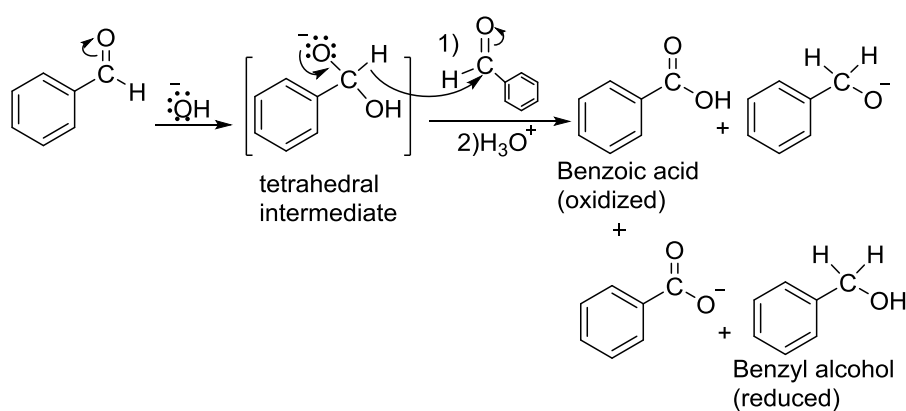
Acyloin Condensation

α -Hydrogen-free aldehydes give an addition reaction in the presence of alkali cyanide (KCN) and occur the acyloin, which is α -hydroxy ketone. (benzoin synthesis).



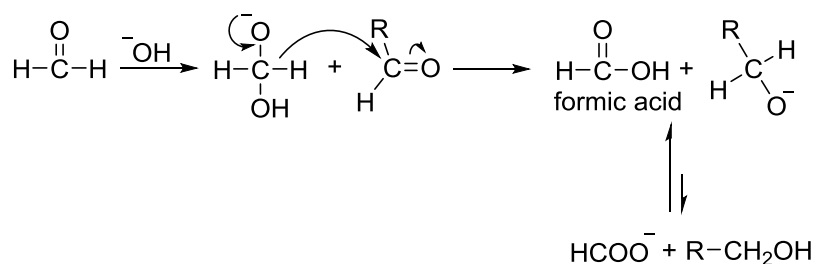
Cannizaro Reaction

α -Hydrogen-free aldehydes give cannizaro reaction in the base environment. One of the two aldehyde molecules is oxidized to carboxylic acid by giving two electrons to the other, while the other is reduced to alcohol by getting electrons. For example; The 2 molecule benzaldehyde interacts with one another to form benzoic acid by oxidation of a molecule and benzyl alcohol by reduction of the other molecule.



Mixed Cannizaro Reaction

When α -hydrogen-free aldehydes are treatment with formaldehyde, formaldehyde converted to formic acid and aldehyde structure converted to alcohol derivatives.



Example:

