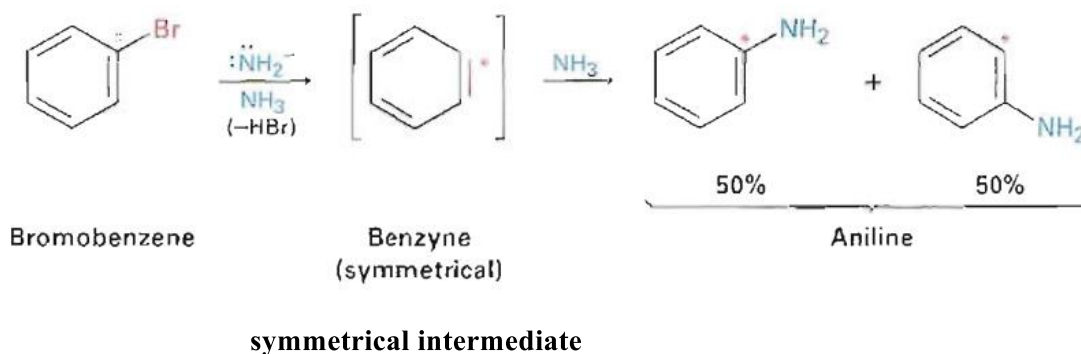


Benzyne Mechanism

Further mechanistic evidence comes from trapping experiments. When bromobenzene is treated with KNH_2 in the presence of a diene such as furan, a Diels-Alder reaction occurs, implying that the symmetrical intermediate is a benzyne, formed by elimination of HBr from bromobenzene.



Benzyne is too reactive to be isolated as a pure compound but, in the presence of water, addition occurs to give the phenol. In the presence of a diene, Diels-Alder cycloaddition takes place. It is an Elimination-Addition Mechanism rather than Addition-Elimination in presence of a strong Base such as NaOH .

