

Q9. The reagents that can be used to convert benzene diazonium chloride to benzene are _____.

- (i) SnCl_2/HCl
- (ii) $\text{CH}_3\text{CH}_2\text{OH}$
- (iii) H_3PO_2
- (iv) LiAlH_4

Ans. (ii) and (iii)

Explanation: Certain mild reducing agents like hypophosphorous acid (phosphinic acid) or ethanol reduce diazonium salts to arenes and themselves get oxidised to phosphorous acid and ethanol, respectively.

Q10. What is the best reagent to convert nitrile to primary amine?

Ans. Reduction of nitriles with sodium/alcohol or LiAlH_4 gives primary amine