

Organic Chemistry Functional Group 03.

NITRILES ISO NITRILES, NITROCOMPOUNDS AND AMINES

1. Why are aromatic amines less basic than Ammonia?
2. How does the NH_2 Group activate the benzene ring?
3. Why are aliphatic amines more basic than ammonia?
4. How is methyl orange prepared?
5. How is Iodobenzene obtained from Aniline?
6. How is Aniline purified from non-basic impurities?
7. Give reasons for the following?
 - a Silver Chloride dissolves in methyl amine solution?
 - b Methyl Amine in water reacts with FeCl_3 to form a precipitate of $\text{Fe}(\text{OH})_3$.
 - c Tertiary Amines do not undergo Acylation?
8. How is Phenol obtained from Benzene diazonium Chloride?
9. Give a test to distinguish between Nitroethane and Ethyl Nitrate?
10. How is Toluene converted into para toluidine?
11. Write the structural formula of a primary, Secondary and Tertiary amine each having molecular formula $\text{C}_3\text{H}_9\text{N}$. Give their IUPAC names?
12. Account for the higher boiling points of alkyl nitriles and iso nitriles than the corresponding alkyl halides.
13. How can you prepare N-Methyl-2-Amino propane from 2-bromopropane through a Carbylamine.
14. Complete the following reaction:

