

HALO ALKANES AND HALOARENES

SUB TOPIC - IV. POLY HALOGEN COMPOUNDS

1. Iodoform is used as

- 1) anaesthetic 2) antiseptic 3) analgesic 4) anti fibrin

2. The following is used in paint removing

- 1) $CHCl_3$ 2) CH_2Cl_2 3) CCl_4 4) CH_3Cl

3. In fire extinguishers, following is used

- 1) CH_3Cl_3 2) CS_2 3) CCl_4 4) CH_2Cl_2

4. The following is used for metal cleaning and finishing

- 1) $CHCl_3$ 2) CHI_3 3) CH_2Cl_2 4) C_6H_6

5. First chlorinated insecticide

- 1) DDT 2) Gammexene 3) Iodoform 4) Freon

6. Freon R - 22 is

- 1) $CHClF_2$ 2) CCl_2F_2 3) CH_3Cl 4) CH_2Cl_2

7. The following is used as anaesthetic

- 1) C_2H_4 2) $CHCl_3$ 3) CH_2Cl_2 4) DDT

8. Freon - 12 is

- 1) CF_3Cl 2) $CHCl_2F$ 3) CF_2Cl_2 4) $CFCl_3$

9. Molecular formula of DDT has

- 1) 5 Cl atoms 2) 4 Cl atoms 3) 3 Cl atoms 4) 2 Cl atoms

10. Which of the following compounds is used as a refrigerant

- 1) $CHCl_3$ 2) CCl_4 3) C_2H_6 4) CCl_2F_2

KEY

- 1) 2 2) 2 3) 3 4) 3 5) 1 6) 1 7) 2 8) 3 9) 1 10) 4

SUB TOPIC - V

- Consider the following reaction, $C_2H_5Cl + AgCN \xrightarrow{EtOH/H_2O} X$ (major). Which one of the following statements is true for X (EAMCET-2009)
 - It gives propionic acid on hydrolysis
 - It has an ester functional group
 - It has a nitrogen linked to ethyl carbon
 - it has a cyanide group

1) IV 2) III 3) II 4) I
- $C_2H_5OH + SOCl_2 \xrightarrow{Pyridine} x + y + z$ in this reaction x, y and z respectively are (EAMCET -2008)

1) $C_2H_4Cl_2, SO_2, HCl$ 2) C_2H_5Cl, SO_2, HCl 3) $C_2H_5Cl, SOCl, HCl$ 4) C_2H_4, SO_2, Cl_2
- Identify 'B' in the following reaction $CH_2 = CH_2 + HCl \xrightarrow{anhydrous AlCl_3} A \xrightarrow[\substack{Zn-Cu \text{ in} \\ C_2H_5OH}]{2H} B + HCl$ (EAMCET - 2007)

1) CH_7 2) C_2H_6 3) C_2H_5Cl 4) C_2H_5OH
- $C_2H_5Cl \xrightarrow{dry Ag_2O} A \xrightarrow[Al_2O_3]{360^\circ} B \xrightarrow{S_2Cl_2} C$ In the above sequence of reactions identify 'C' (EAMCET-2007)

1) Chloretone 2) Chloropicrin 3) Mustard gas 4) Lewisite gas
- Ethyl Chloride on reduction with $LiAlH_4$ gives compound 'X' as important product, 'X' on chlorination with one mole of Cl_2 in the presence of light at ordinary temperature gives Y, what is 'Y'? (EAMCET-2007)

1) C_2H_6 2) C_2H_4 3) C_2H_5Cl 4) C_2H_5OH
- Which of the following can give a grignard reagent when reacted with magnesium in dry ether? (EAMCET-2006)

1) C_2H_6 2) C_2H_5Cl 3) C_2H_5OH 4) C_2H_5CN
- Which of the following reagents when heated with ethyl chloride forms ethylene (EAMCET-2006)

1) Aqueous KOH 2) Zn/HCl 3) Alcoholic - KOH 4) HI
- Tertiary alkyl halides are particularly substituted by S_N2 mechanism because of (EAMCET-2005)

1) Steric hindrance 2) Inductive effect 3) Instability 4) Insolubility
- Identify A and B in the following reactions : $A \xrightarrow{aq. NaOH/\Delta} C_2H_5OH \xleftarrow{AgOH} B$ (EAMCET 2005)

1) $A = C_2H_2, B = C_2H_6$ 2) $A = C_2H_5Cl, B = C_2H_4$

3) $A = C_2H_4, B = C_2H_5Cl$ 4) $A = C_2H_5Cl, B = C_2H_5Cl$

10. What is the molecular formula of the product formed when Benzene is reacted with ethyl chloride in presence of anhydrous aluminium chloride (EAMCET 2004)
 1) C₈H₁₀ 2) C₆H₆ 3) C₈H₈ 4) C₆H₅Cl
11. Identify A and B in the following reaction (EAMCET 2004)
 1) A = aq.KOH, B = AgOH 2) A = alc.KOH, B = aq.NaOH
 3) A = aq.NaOH, B = AgNO₂ 4) A = AgNO₂, B = KNO₂
12. Which of the following reactions is an example of nucleophilic substitution reaction ? (AIPMT 2009)
 1) 2 RX + Na → R - R + 2 NaX 2) RX + H₂ → RH + HX
 3) RX + Mg → RMgX 4) RX + KOH → ROH + KX
13. In S_N2 substitution reaction of the type $R-Br + Cl^- \xrightarrow{DMF} R-Cl + Br^-$ which one of the following has the highest relative rate ? (AIPMT 2008)
 1) $CH_3 - \overset{\overset{CH_3}{|}}{C} - CH_2 - Br$ 2) CH₃CH₂Br
 3) CH₃ - CH₂ - CH₂Br 4) $CH_3 - \overset{\overset{CH_3}{|}}{C} - CH_2 - Br$

KEY

- 1) 2 2) 2 3) 2 4) 3 5) 3 6) 2 7) 3
 8) 1 9) 4 10) 1 11) 1 12) 4 13) 2