

14 Alkenes – Part 2 —Answers

Answers

Work through these after trying the questions yourself.

14.1 C_nH_{2n} ; the functional group is the $C=C$ double bond.

14.2 (a) an alkane \ (b) an alcohol.

14.3 Shake the compound with orange bromine water; with an alkene the orange colour disappears (decolourises).

14.4 The alkene's $C=C$ double bond reacts with the bromine by addition (removing it from solution); an alkane has no $C=C$ and does not react.

14.5 Many alkene molecules open their double bonds and join into one long chain (a polymer), with no other product.

14.6 Poly(ethene).

14.7 The product is 1,2-dibromoethane, CH_2BrCH_2Br . The $C=C$ double bond opens, and one bromine atom adds to each of the two carbons —an addition reaction.