

16 Alcohols – Part 2 —Answers

Answers

Work through these after trying the questions yourself.

16.1 Acidified potassium dichromate(VI), $\text{K}_2\text{Cr}_2\text{O}_7$ (or acidified KMnO_4).

16.2 (a) a ketone \ (b) it is not oxidised.

16.3 An aldehyde (by distillation) and a carboxylic acid (by reflux).

16.4 Orange to green.

16.5 Distillation removes (boils off and collects) the aldehyde as soon as it forms, so it leaves the mixture before it can be oxidised further to the acid.

16.6 It is a tertiary alcohol. Tertiary alcohols are not oxidised by acidified dichromate, so the dichromate is not reduced and stays orange (a primary or secondary alcohol would turn it green).