

Solutions

Each answer shows the steps, then the **result**.

2.1

- the alcohol functional group is **–OH** (hydroxyl)

2.2

- fermentation of glucose: **ethanol** and **carbon dioxide**

3.1 B

- ethanol is used as a **solvent and a fuel**
- A, C and D are not uses of ethanol

3.2

(a)

- fermentation uses **renewable sugar**

(b)

- the ethene route is **fast** and gives **pure ethanol**

3.3

- **yeast**
- about 25–35 °C
- **absence of air/oxygen**