

employed as a starting material for the production of acetic acid. It is, nevertheless, utilised to make bakelite, glues, and polymeric items. In the silvering of mirrors, it also works as a reducing agent.

7. Which of the following compounds is formed when benzyl alcohol is oxidised with KMnO_4 ?

- a) CO_2 and H_2O
- b) Benzoic acid
- c) Benzaldehyde
- d) Benzophenone

Answer: b

Explanation: When benzyl alcohol is oxidised with KMnO_4 , benzoic acid is the result.

8. At 287K, which of the following is a gas?

- a) Propanal
- b) Acetaldehyde
- c) Formaldehyde
- d) Acetone

Answer: c

Explanation: At room temperature, methane is a foul-smelling gas. Ethanal is a volatile liquid that boils at 294 degrees Fahrenheit. At room temperature, other aldehydes and ketones exist as liquids or solids.

9. Which of the following substances is the least water-soluble?

- a) Methanal
- b) Pentanal

c) Propanone

d) Ethanal

Answer: b

Explanation: As polar carbonyl group may establish hydrogen bonds with water molecules, the lower aldehydes and ketones are miscible in water in all quantities. However, as the length of the alkyl chain grows longer, the solubility drops dramatically. Aldehydes and ketones with more than four carbon atoms are nearly water- insoluble.

10. Which of these has the least unpleasant odour?

a) Methanal

b) Butanal

c) Propanal

d) Ethanal

Answer: b

Explanation: The odour gets less strong and more fragrant as the size of the aldehyde molecule grows. Methanal has the strongest odour of all the