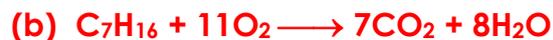


Quiz (Combustion)

1. Write balanced chemical equation to show the complete combustion of the following compounds:
 - (a) Pentane
 - (b) Heptane
 - (c) Octane
2. Calculate the percentage by mass of carbon in Question 1.
3. Relate the flammability and the percentage by mass of carbon.
4. Suggest suitable tests to identify the products of combustion.

Suggested Answer



2. (a) $\% \text{C} = \frac{5 \times 12}{(5 \times 12 + 12 \times 1)} \times 100 \%$
 $= 83.33 \%$

(b) $\% \text{C} = \frac{7 \times 12}{(7 \times 12 + 16 \times 1)} \times 100 \%$
 $= 84.00 \%$

(c) $\% \text{C} = \frac{8 \times 12}{(8 \times 12 + 18 \times 1)} \times 100 \%$
 $= 84.21 \%$

3. The flammability decreases if the % C increases



H_2O : Turns blue dry cobalt chloride paper pink.
Turns white anhydrous copper(II) sulphate powder blue.