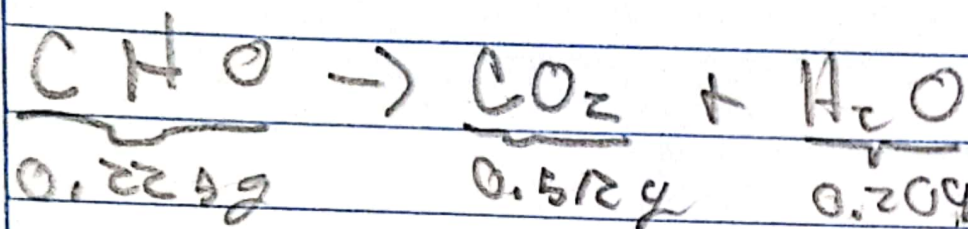


✓ Check



$$\text{H?} = 0.209 \left(\frac{1 \text{ mol H}_2\text{O}}{18.02} \right) \left(\frac{2 \text{ mol H}}{1 \text{ mol H}_2\text{O}} \right) \left(\frac{1.01 \text{ g H}}{1 \text{ mol H}} \right) = 0.0234 \text{ g H}$$

$$\begin{array}{r} \text{C?} = 0.512 \text{ g} \left(\frac{1 \text{ mol CO}_2}{44.01} \right) \left(\frac{1 \text{ mol C}}{1 \text{ mol CO}_2} \right) \left(\frac{12.01 \text{ g C}}{1 \text{ mol C}} \right) = 0.1362 \text{ g} \\ \hline - 0.224 \text{ g} \\ \hline 0.0156 \text{ g} \end{array}$$

$$H = \frac{0.034}{1.01} = 0.0232 \text{ mol H} / 975 \times 10^{-6} = 29$$

$$C = \frac{0.186}{12.01} = 0.0155 \text{ mol C} / 975 \times 10^{-6} = 16 \rightarrow C_{16}H_{24}O$$

$$O = \frac{0.0156}{16} = 975 \times 10^{-6} \text{ mol O} / 975 \times 10^{-6} = 1$$

$$116 \text{ g/mol}$$

$$29 \times 1.01 = 29.29$$

$$16 \times 12.01 = 192.16$$

$$1 \times 16 = 16$$

$$\frac{116}{112.3} = 1.0331 \Rightarrow C_{16}H_{24}O$$