

Exercice 3

$$\begin{aligned} 1. \text{CH}_2\text{OH}-\text{CHOH}-\text{CH}_2\text{OH} &= 3 \text{ atomes de carbone} \\ &= 8 \text{ atomes d'hydrogène} \\ &= 3 \text{ atomes d'oxygène.} \end{aligned}$$

$$\begin{aligned} 2. M &= \text{CH}_2\text{OH}-\text{CHOH}-\text{CH}_2\text{OH} = 3 \times M(\text{C}) + 8 \times M(\text{H}) + 3 \times M(\text{O}) \\ &= 3 \times 12 + 8 \times 1 + 3 \times 16 \\ &= 36 + 8 + 48 \\ &= 36 + 56 \\ &= 92 \text{ g/mol} \end{aligned}$$

Exercice 4

$$\left. \begin{array}{l} 1. \text{ 8 atomes d'hydrogène} \\ \text{ 7 atomes d'oxygène} \\ \text{ 6 atomes de carbone} \end{array} \right\} \text{acide citrique.}$$

$$\begin{aligned} 2. M &= 8 \times M(\text{H}) + 7 \times M(\text{O}) + 6 \times M(\text{C}) \\ &= 8 \times 1 + 7 \times 16 + 6 \times 12 \\ &= 8 + 112 + 72 \\ &= 192 \text{ g/mol.} \end{aligned}$$

Exercice 5

$$\begin{aligned} 1. M &= \text{NaClO} = 1 \times M(\text{Na}) + 1 \times M(\text{Cl}) + 1 \times M(\text{O}) \\ &= 1 \times 23 + 1 \times 35,5 + 1 \times 16 \\ &= 23 + 35,5 + 16 \\ &= 74,5 \text{ g/mol} \end{aligned}$$