

$$1 - m(\text{C}_8\text{H}_9\text{NO}_2) = 8 \times m(\text{C}) + 9 \times m(\text{H}) + m(\text{N}) + 2 \times m(\text{O})$$

$$m(\text{C}_8\text{H}_9\text{NO}_2) = 8 \times 1,99 \times 10^{-26} + 9 \times 1,67 \times 10^{-27} + 2,32 \times 10^{-26} + 2 \times 2,66 \times 10^{-26}$$

$$m(\text{C}_8\text{H}_9\text{NO}_2) = \underline{2,51 \times 10^{-25} \text{ kg}}$$

$$3 - N = \frac{m}{m(\text{C}_8\text{H}_9\text{NO}_2)} = \frac{1,000 \times 10^{-3}}{2,51 \times 10^{-25}} = 3,99 \times 10^{21} \text{ molécules}$$

$$4 - n = \frac{N}{N_A} = \frac{3,99 \times 10^{21}}{6,02 \times 10^{23}} = 6,63 \times 10^{-3} \text{ mol}$$

$$5 - N_G = \frac{n'}{n} = 8 \text{ gélules par jour}$$