

Chapitre 1

34 Un désinfectant

1. 1 L de solution fournit 10 L de O_2 : $n(O_2) = \frac{V(O_2)}{V_m} = \frac{10}{22,0} = 0,455 \text{ mol}$.

2. Donc 250 mL fournissent : $\frac{0,455}{4} = 0,114 \text{ mol}$. Alors $n(H_2O_2) = 2 \times n(O_2) = 0,228 \text{ mol}$.

3. $c = \frac{0,228}{0,250} = 0,912 \text{ mol. L}^{-1}$.

4. $M(H_2O_2) = 2 \times 1,0 + 2 \times 16,0 = 34,0 \text{ g.mol}^{-1}$ et $m(H_2O_2) = 0,228 \times 34,0 = 7,75 \text{ g}$.