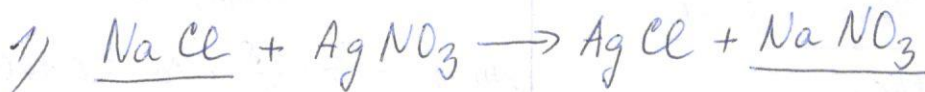


# PL 7 - řešení



$$M(\text{NaCl}) = 23 + 35 = \underline{58 \text{ g/mol}}$$

$$M(\text{NaNO}_3) = 23 + 14 + 3 \cdot 16 = \underline{85 \text{ g/mol}}$$

$$58 \text{ g NaCl} \quad \dots \quad 85 \text{ g NaNO}_3$$

$$10 \text{ g } \text{---} \quad \dots \quad \text{---} \quad \text{---}$$

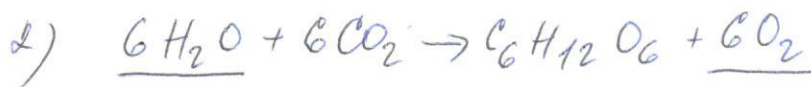
$$x = \frac{85 \cdot 10}{58} = \underline{\underline{14,7 \text{ g}}}$$

[event.]

$$m(\text{NaNO}_3) = \frac{b}{a} \cdot \frac{M(\text{NaNO}_3)}{M(\text{NaCl})} \cdot m(\text{NaCl})$$

$$m \text{ ---} = \frac{1}{1} \cdot \frac{85}{58} \cdot 10 = \underline{\underline{14,7 \text{ g}}}$$

Při reakci vznikne 14,7 g NaNO<sub>3</sub>.



$$M(\text{H}_2\text{O}) = 2 \cdot 1 + 16 = \underline{18 \text{ g/mol}}$$

$$M(\text{O}_2) = 2 \cdot 16 = \underline{32 \text{ g/mol}}$$

$$6 \cdot 18 = 108 \text{ g H}_2\text{O} \quad \dots \quad 6 \cdot 32 = 192 \text{ g O}_2$$

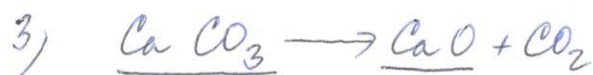
$$10 \text{ g } \text{---} \quad \dots \quad \text{---} \quad \text{---}$$

$$x = \frac{192 \cdot 10}{108} = \underline{\underline{17,8 \text{ g}}}$$

$$m(\text{O}_2) = \frac{b}{a} \cdot \frac{M(\text{O}_2)}{M(\text{H}_2\text{O})} \cdot m(\text{H}_2\text{O})$$

$$m \text{ ---} = \frac{6}{6} \cdot \frac{32}{18} \cdot 10 = \underline{\underline{17,8 \text{ g}}}$$

Vznikne cca 17,8 g kyslíku.



$$M(\text{CaCO}_3) = 40 + 12 + 3 \cdot 16 = \underline{100 \text{ g/mol}}$$

$$M(\text{CaO}) = 40 + 16 = \underline{56 \text{ g/mol}}$$

$$100 \text{ g CaCO}_3 \quad \dots \quad 56 \text{ g CaO}$$

$$0,5 \text{ t} = 500 \text{ kg } \text{---} \quad \dots \quad \text{---} \quad \text{---}$$

$$x = \frac{56 \cdot 500}{100} = \underline{\underline{280 \text{ kg}}}$$

$$m(\text{CaO}) = \frac{b}{a} \cdot \frac{M(\text{CaO})}{M(\text{CaCO}_3)} \cdot m(\text{CaCO}_3)$$

$$m \text{ ---} = \frac{1}{1} \cdot \frac{56}{100} \cdot 500 = \underline{\underline{280 \text{ kg}}}$$

Vyrobí se 280 kg páleného vápna.



$$M(\text{H}_2\text{O}) = 2 \cdot 1 + 16 = \underline{18 \text{ g/mol}}$$

$$M(\text{H}_2) = 2 \cdot 1 = \underline{2 \text{ g/mol}}$$