

ANTWOORDEN PROEFTOETS ANORGANISCH

① a

$$\begin{array}{rcl}
 Ca = 40,08 & \times 3 & = 120,24 \\
 P = 30,97 & \times 2 & = 61,94 \\
 O = 15,99 & \times 8 & = 127,92 + \\
 & & 310,07 \text{ g/mol}
 \end{array}$$

b

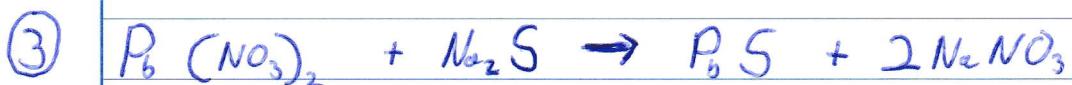
$$\begin{array}{rcl}
 C = 12,07 & \times 4 & = 48,04 \\
 H = 1,008 & \times 8 & = 8,06 + \\
 & & 92,13 \text{ g/mol}
 \end{array}$$

② a

$$\begin{array}{rcl}
 C = 12,07 & \times 1 & = 12,01 \\
 O = 15,99 & \times 2 & = 31,98 + \\
 & & 43,99 \text{ g/mol}
 \end{array}$$

b

$$\begin{array}{rcl}
 C = 12,07 & \times 2 & = 24,02 \\
 H = 1,008 & \times 6 & = 6,05 \\
 O = 15,99 & \times 1 & = 15,99 + \\
 & & 46,06
 \end{array}$$



$$n = \frac{m}{M} \rightarrow \frac{30}{78,05} = 0,38 \text{ mol } Na_2S$$

$$\text{Reactie} = 1:1 \rightarrow 0,38 \text{ mol } PbS$$

$$m = n \cdot M \rightarrow 0,38 \times 239,24 = 91,57 \text{ g } PbS$$



$$n = c \cdot V \rightarrow 0,0986 \times 17,65 = 1,74 \text{ mmol } OH^-$$

$$\text{Reactie} = 1:1 \rightarrow 1,74 \text{ mmol } CH_3COOH$$

$$m = n \cdot M \rightarrow 1,74 \times 60,05 = 104,50 \text{ mg } CH_3COOH$$

$$\frac{104,5}{2578} \times 100\% = 4,05\% (\text{m/m}) \text{ } CH_3COOH$$

⑤



$$n = \frac{m}{M} \rightarrow \frac{151,4}{106,0} = 1,43 \text{ mmol } Na_2CO_3$$

Reactie = 1:2 \rightarrow 2,86 mmol HCl

$$c \frac{n}{V} \rightarrow \frac{2,86}{28,13} = 0,1016 \text{ mmol/ml HCl}$$

mol/L
 M