

Есеп 1

Б-не

$$V(\text{H}_2) = 4,81 \text{ л}$$

$$m(\text{кисота}) = 13 \text{ г}$$

$$m(\text{D}) = 9,20 \text{ г}$$

 $\text{Me}_2\text{X} - ?$

Есеп 2

Б-не

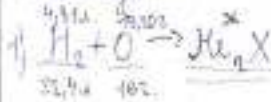
$$\omega(\text{X}) = 20,2\%$$

$$m(\text{B}) = 5 \text{ г}$$

$$m(\text{B}^* \cdot \text{H}_2\text{O}) = 9,24 \text{ г}$$

 $n(\text{H}_2\text{O}) - ?$

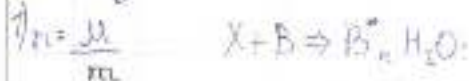
Шешуі.



$$X = \frac{13,10 - 2 \cdot 4}{4,81 \cdot 16} \approx 56$$

жауабы: 56, $\text{Me}_2\text{X} = \text{H}_2\text{O}$

Шешуі.



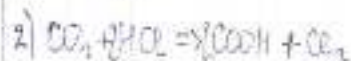
$$M(\text{H}_2\text{O}) = 1 \cdot 2 + 16 = 18$$

$$M(\text{H}_2\text{O}) = 18 \text{ г/моль}$$

$$n(\text{H}_2\text{O}) = \frac{9,24 - 5}{18} = 0,24 \text{ моль}$$

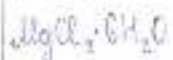
$$n = \frac{18 \cdot 0,24}{5} = 0,864 \text{ моль}$$

жауабы: 0,86 моль



Есеп 3

Б-не



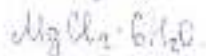
$$m_{\text{қым}}(\text{Mg}) = 0,1 \text{ м}$$

$$V_{\text{қым}} = 200 \text{ мл}$$

$$m_{\text{бүлкіні}} = 0,09 \text{ г}$$

 $\omega(\text{Cl}_2) - ?$

Шешуі.



$$\omega = \frac{m_{\text{қым}}}{m_{\text{қым}}} \cdot 100\%$$

$$m_{\text{қым}} = \frac{m_{\text{қым}} \cdot \omega}{100\%}$$

$$M(\text{Cl}_2) = 35,5 \cdot 2 = 71$$

$$M(\text{Cl}_2) = 71 \text{ г/моль}$$

$$n(\text{Cl}_2) = \frac{0,1}{71} = 0,0014 \text{ моль}$$

$$m_{\text{қым}} = \frac{0,1 \cdot 71}{100} = 0,071 \text{ г}$$

$$\omega = \frac{0,071}{0,1} \cdot 100\% = 71\%$$

жауабы: 71%

$$\textcircled{1} \quad \text{B} + \text{O}_2 = \text{BO}_2$$

$$\text{BO} + 2\text{HCl} = \text{BeCl}_2 + \text{H}_2\text{O}$$

$$27 - 4,81 = 22,19$$

$$27 - 13 = 14$$

$$\frac{14 + 18,2}{100} = 33,2\%$$

Най заттар B ; O_2
 үлестірі: 33,2%
 $\text{BO}_2 + 2\text{HCl} = \text{B(OH)} + 2\text{H}_2\text{O}$
 $\rho = \frac{w}{m}$
 $w = \rho \cdot m = 1,985 \cdot 22 = 43,995\%$
 $43,995 - 100\%$
 $x = 25\%$
 $x = \frac{43,995 - 25}{100} = 1,99875\% \approx 2\%$

$$\textcircled{2} \quad \text{MgCl}_2 \cdot 6\text{H}_2\text{O}$$

$$t = 300^\circ\text{C}$$

$$m = 0,2912$$

$$V = 100 \text{ мл}$$

$$\text{MgCl} = 26 + 71 = 97 \cdot 300^\circ = 0,2912$$

$$0,291 \cdot 0,1 = 2,91$$

$$100 - 2,91 = 97,09$$

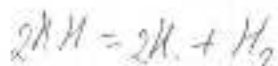
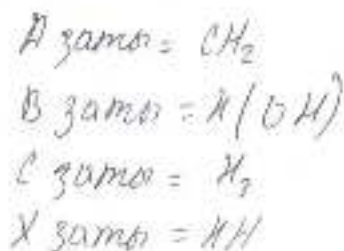
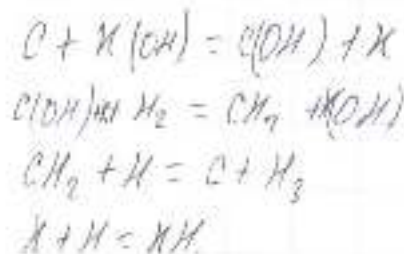
$$0,632 - 100 = 0,532 t$$

$$0,632 + 120 = 12,632 : 0,5 = 2,5264 \text{ т}$$

$$\textcircled{4} \quad \rho = 9,13 \text{ г/мл}$$

$$x \cdot n = 22,4 \text{ мл}$$

$$9,13 \cdot 22,4 = 204,912 \text{ граммы}$$



1) Дегі:

$$m_{(X+HCl)} = 27g$$

$$m_{(H_2)} = 4,81g$$

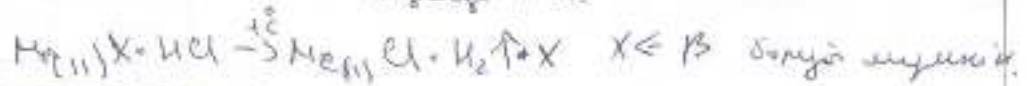
$$m_{(X+HCl)} = 13g \text{ ақшағ.}$$

$$m_{(H_2O)} = 19,20g$$

найт заттар - ?

$$W_{(X+HCl)} = ?$$

Шешіміз: $X + HCl \rightarrow H_2 \uparrow$ сүттегі бөлінеді:
 \downarrow
 өңделі: HCl.

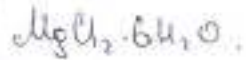


Қоспаңы массаларының сүттегі: қоспаңы
 27g - 13g = 14g \rightarrow 14g + 19,20g \rightarrow 33,2g. Соуға массасы: 33,2g

$$W = \frac{27g}{33,2} = 0,816 \approx 81,6\% \Rightarrow W = 80\%$$

- 1) $W = 80\%$, $B \leftarrow X$. - Найт зат.
- 2) H_2, B_2

3) Дегі:



$$m_{(A)} = 0,2512$$

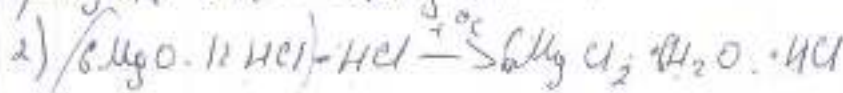
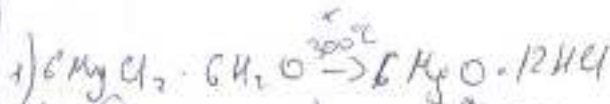
$$V_{(HCl)} = 50 \text{ мл}$$

$$V_{(H_2)} = 100 \text{ мл}$$

$$m_{(H_2 + H_2O)} = 0,632g$$

$$1) W_{(A)} = ?$$

Шешіміз: 1) $W_{(A)} = \frac{m_s}{m_e} \Rightarrow W_{(A)} = \frac{0,2512}{0,6322}$



№1. Трансферма

Б-н:

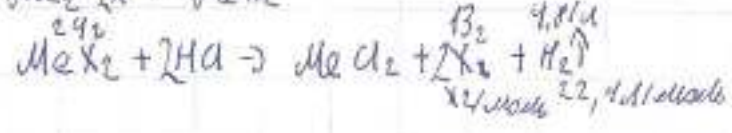
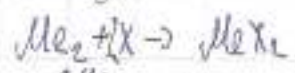
$$mC_{Me_2} + X = 2 \cdot 42$$

$$\omega(H_2) = 4,8 + 1$$

$$n(Me_2) = ?$$

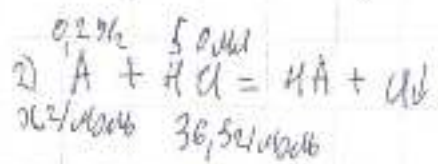
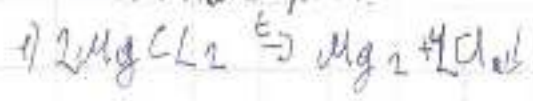
$$n(X) = ?$$

Шешуі:

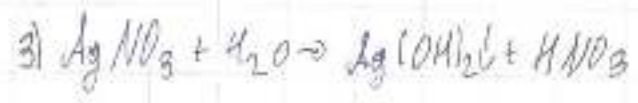


№2. Трансферма

№3. Трансферма



$$x = \frac{0,292 \cdot 50 - 36,5}{50}$$



№4. Трансферма

Б-н:

$$\omega(X_2O_5) = 3,132$$

$$m(X) = ?$$

Шешуі:

