

Есеп №1. Заттар қоспасы.

Берілгені:

$$m(\text{қоспа}) = 272$$

$$V(\text{H}_2) = 4,81 \text{ л}$$

$$T = 20^\circ\text{C}$$

$$p = 1 \text{ атм}$$

$$m_{\text{H}_2}(\text{қоспа}) = 27 - 132$$

$$m_{\text{O}_2}(\text{қоспа}) = 19,202 + 27$$

Табу керек:

$$1. \text{Me(II)} - ?$$

$$X - ?$$

$$\omega(\text{Me(III)}) - ?$$

$$\omega(X) - ?$$

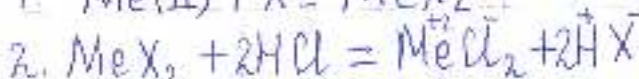
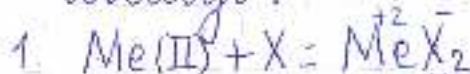
$$2. \text{Me(II)} \text{ және } X + \text{KOH} = ?$$

$$\omega(\text{Me(OH)}_2) - ?$$

$$\omega = 25\%$$

$$\rho = 1,1852 \text{ г/мл}$$

Шешуі:



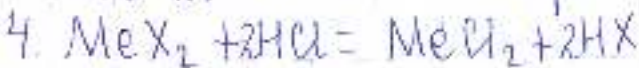
$$3. n(\text{H}_2) = V(\text{H}_2) : V_m$$

$$n(\text{H}_2) = 4,81 : 22,4 = 0,215 \text{ моль}$$

$$m(\text{H}_2) = n \cdot M$$

$$m(\text{H}_2) = 0,215 \cdot 2 = 0,43 \text{ г}$$

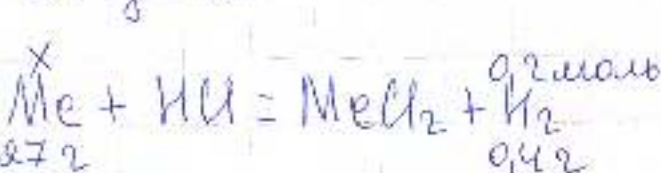
$$M(\text{H}_2) = 2 \cdot 1 = 2 \text{ г/моль}$$



$$m(\text{Me(III)}) = x$$

$$m(X) = y$$

$$x + y = 27$$



$$x = \frac{0,2 \cdot 27}{0,4} = 0,08 \text{ моль (Me(II))}$$

$$n(\text{Me(III)}) = 0,08 - n(X)$$

$$M(\text{MeX}_2) = \frac{m}{n}$$

$$M(\text{MeX}_2) = \frac{27}{0,08} = 337,5 \text{ г/моль}$$

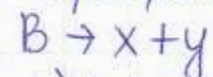
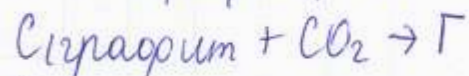
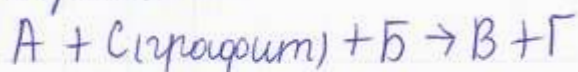
$$272 = m(\text{Me(II)}) + m(X)$$

$$27x = 100\%$$

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

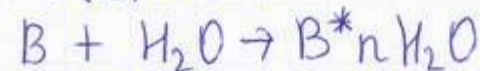
Есеп № 2. Белгісіз заттар.

Берілгені:



$$\omega(x) = 20,2\%$$

$$m(B) = 5 \text{ г}$$



$$m(B^* n H_2O) = 9,04 \text{ г}$$

Табу керек:

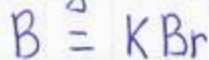
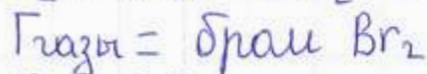
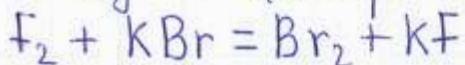
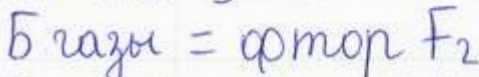
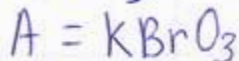
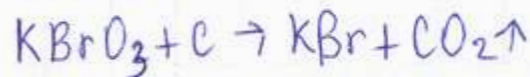
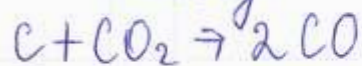
A - ?

B - ?

B - ?

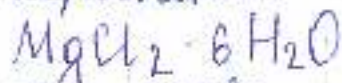
Г - ?

Шешуі:



Есеп №3. Бишофит

Берілгені:



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

$$m(A) = 0,2912$$

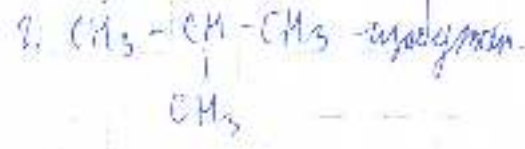
Тапсырма №1

1. $Ag - 0,9$ моль, $Al - 0,3$ моль

2. Частичное, 10,2 г.

Тапсырма №4

1. 70,14



CH_3