

Қатысушының шешімдерін толтыруға арналған өріс / Поле для заполнения решений участника

Парақ / Страница № 1

$$N1. \quad m(K) = \frac{39 - 28,68}{1 - 1,471\%} \quad x = \frac{136 - 100\%}{x - 47,06\%} = \frac{136 \cdot 47,06}{100} = 64 : 16 = 4 (O)$$

$$\omega(K) - 28,68\%$$

$$\omega(H) - 1,471\%$$

$$\omega(P) - 22,79\%$$

$$\omega(O) - 47,06\%$$

$$m(K) = \frac{39 - 28,68}{1 - 1,471\%}$$

$$x - 100\%$$

$$x = 135,9 \approx 136$$

$$136 - 100\%$$

$$x - 47,06\%$$

$$x = \frac{136 \cdot 47,06}{100} = 64 : 16 = 4 (O)$$

$$136 - 100\%$$

$$x - 22,79\%$$

$$x = 30,9 \approx 31 : 31 = 1 (P)$$

$$136 - 100\%$$

$$x - 1,471\%$$

$$x = 1,9 \approx 2 : 1 = 2 (H)$$

$$136 - 100\%$$

$$x - 28,68\%$$

$$x = 39 : 39 = 1 (K)$$

мауалы : 1 /  $KH_2PO_4$ 

$$m(K): K_x H_y P_z O_u$$

$$V(KH_2PO_4) - 83 \text{ мл}$$

$$\omega(KH_2PO_4) - 40\%$$

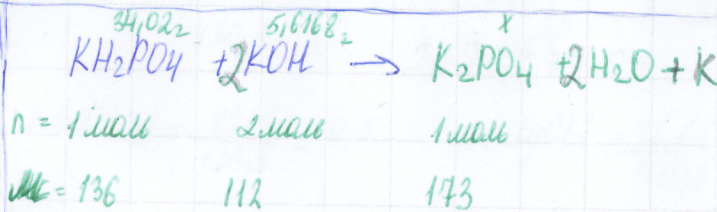
$$\rho = 1,352 \text{ г/мл}$$

$$V(KOH) - 23,6 \text{ мл}$$

$$\omega(KOH) - 20\%$$

$$\rho = 1,192 \text{ г/мл}$$

$$m(\text{ерім}) - ?$$



$$m = \frac{\omega \rho V}{100} = \frac{83 \cdot 40\% \cdot 1,35}{100} = 34,02 \text{ г } (KH_2PO_4)$$

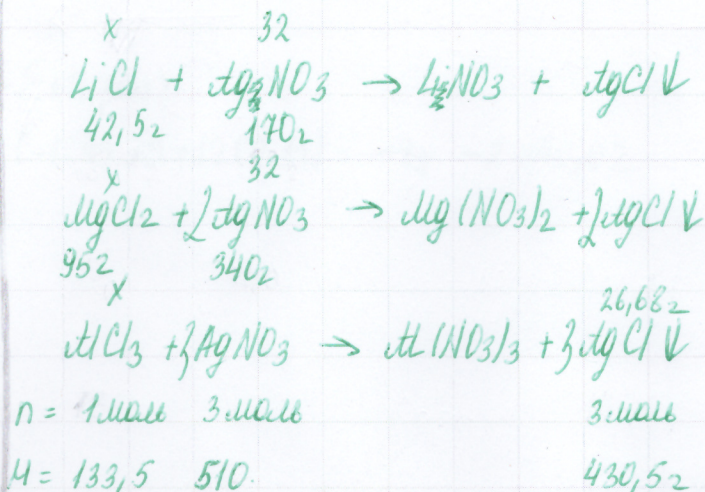
$$m(KOH) = \frac{23,6 \cdot 20\% \cdot 1,19}{100} = 5,61682$$

$$n(KH_2PO_4) = \frac{34,02}{136} = 0,25 \quad n(KOH) = 0,05 \text{ моль}$$

$$n = \frac{m}{M}$$

$$\frac{5,6168}{112} = \frac{x}{173} \quad x = 8,672 \text{ г } (K_2PO_4)$$

№4  
 $w(\text{LiCl}) - 10\%$   
 $w(\text{MgCl}_2) - 10\%$   
 $w(\text{AlCl}_3) - 10\%$   
 $w(\text{AgNO}_3) - 20\%$   
 $m(\text{AgCl}) - 26,68$



$n = 1 \text{ моль} \quad 3 \text{ моль} \quad 3 \text{ моль}$   
 $M = 133,5 \quad 510 \quad 430,52$

$$x = \frac{133,5 \cdot 26,68}{430,5} = 8,272 - 10\% \quad x = \frac{8,27 \cdot 100}{10} = 82,72$$

$$n(\text{AlCl}_3) = \frac{82,7}{133,5} = 0,6 \quad n(\text{AgCl}) = \frac{26,68}{430,5} = 0,06 \text{ моль}$$

$$m(\text{AgNO}_3) = \frac{x}{510} = \frac{26,68}{430,5} \quad x = \frac{510 \cdot 26,68}{430,5} = 31,6 \approx 32$$

$$m(\text{MgCl}_2) = \frac{95 \cdot 32}{340} = 8,94 - 10\% \quad x = 89,42$$

$$m(\text{LiCl}) = \frac{42,5 \cdot 32}{170} = 8 - 10\% \quad x = 802$$

LiCl

$$w(\text{Li}) = \frac{42,5 - 100\%}{7 - x} \quad x = 16,47\% \approx 16,5\%$$

$$w(\text{Cl}) = \frac{42,5 - 100\%}{355 - x\%} \quad x = 83,5\%$$

AlCl3

$$w(\text{Al}) = \frac{133,5 - 100\%}{27 - x\%} \quad x = 20,22\%$$

$$w(\text{Cl}) = \frac{133,5 - 100\%}{106,5 - x\%} \quad x = 49,7\%$$

MgCl2

$$w(\text{Mg}) = \frac{95 - 100\%}{24 - x} \quad x = 25,2\%$$

$$w(\text{Cl}_2) = \frac{95 - 100\%}{71 - x} \quad x = 74,73\%$$

№5

$$\Delta H = \sum \Delta H_{\text{сж}} - \sum \Delta H_{\text{жж}}$$

$$\Delta H = -2279,3 - (-1299,39 + 1267,11) = -2279,3 - (-267,78) = -2011,52$$