

II ()

10

1.

:

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|----|
| 2 | 3 | 4 | 3 | 3 | 4 | 1 | 1 | 4 | 4 |

- 10

2.

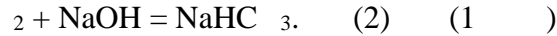
1.

$$() = 29 - 29 \cdot 0,034 = 28 \quad (1 \quad)$$

;

$2 \quad 4,$

$$: (1 \quad)$$



2.

$$: 5,6 / 22,4 = 0,25 \quad (1 \quad)$$

3.

(2):

$$n(N \quad) = n(\quad 2) = n(\quad) = 0,25 \quad . \quad (1 \quad)$$

4.

: (1 \quad)

$$m(NaOH) = 0,25 \quad \cdot 40 / \quad - 10 ;$$

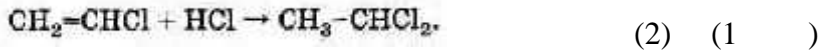
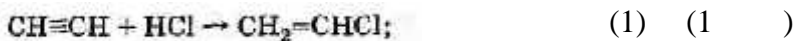
$$m \text{ p-pa} = 10 : 0,1 = 100$$

$$V \text{ p-pa} = 90,9$$

- 7

3.

1.



2.

$$n_1(C_2H_3Cl) = \frac{1800 \text{ кг}}{62,5 \text{ кг/кмоль}} = 28,8 \text{ кмоль.} \quad (1 \quad)$$

3.

l:

$$m(\text{см.}) = \frac{1800 \text{ кг}}{0,948} = 1898,73 \text{ кг}; \quad (1 \quad)$$

$$m_{\text{ост}}(HCl) = 1898,73 \text{ кг} \cdot 0,044 = 83,54 \text{ кг.} \quad (1 \quad)$$

4.

(2):

$$n(\text{C}_2\text{H}_4\text{Cl}_2) = \frac{1398,73 \text{ кг} \cdot 0,008}{99 \text{ кг/кмоль}} = 0,153 \text{ кмоль}; \quad (1)$$

$$n_2(\text{C}_2\text{H}_3\text{Cl}) = n(\text{C}_2\text{H}_4\text{Cl}_2) = 0,153 \text{ кмоль}; \quad (1)$$

$$n_2(\text{HCl}) = n(\text{C}_2\text{H}_4\text{Cl}_2) = 0,153 \text{ кмоль}. \quad (1)$$

5.

$$n_{\text{общ}}(\text{C}_2\text{H}_3\text{Cl}) = n_1(\text{C}_2\text{H}_2\text{Cl}) + n_2(\text{C}_2\text{H}_3\text{Cl}); \quad (1)$$

$$n_{\text{общ}}(\text{C}_2\text{H}_3\text{Cl}) = 28,8 \text{ кмоль} + 0,153 \text{ кмоль} = 28,953 \text{ кмоль}; \quad (1)$$

$$n(\text{C}_2\text{H}_2) = n_{\text{общ}}(\text{C}_2\text{H}_3\text{Cl}) = 28,953 \text{ кмоль}; \quad (1)$$

$$m(\text{C}_2\text{H}_2) = 28,953 \text{ кмоль} \cdot 26 \text{ кг/моль} = 752,78 \text{ кг}. \quad (1)$$

6.

1:

$$n_1(\text{HCl}) = n_{\text{общ}}(\text{C}_2\text{H}_3\text{Cl}) = 28,953 \text{ кмоль}; \quad (1)$$

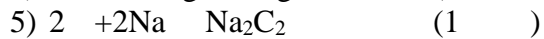
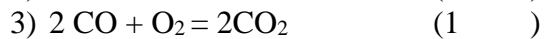
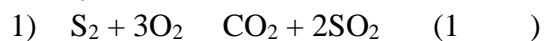
$$m(\text{HCl}) = m_1(\text{HCl}) + m_2(\text{HCl}) + m_3(\text{HCl}) \quad (1)$$

$$m(\text{HCl}) = 36,5 / \cdot (28,953 + 0,153) + 83,54 = 1145,91 \text{ кг}. \quad (1)$$

$$: m(1) = 1145,91 \text{ кг}; m(2) = 752,78 \text{ кг}.$$

- 15

4.



- 8

5.

1.

).

2.

(- 2)

3. (-2, -1)
 (-2)

-7

1). : 2 ,
 2). : (-2)

3). : .(1)

4). : (- , - 2+2)

-7

1). : 3 ,
 : .(1)
 2). PH (<7, =7, >7)
 (6)

-7

, :