

$$V_{\text{смеси}} = 850 \text{ л}$$

C_2H_4
80%

680 л
30,357 моль

C_2H_6
10%

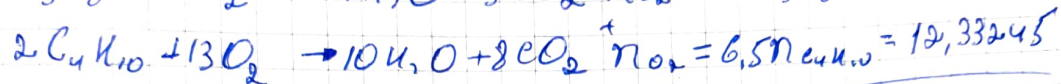
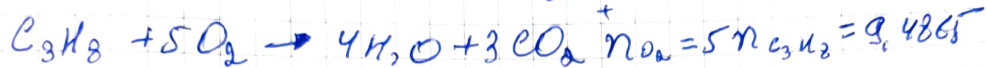
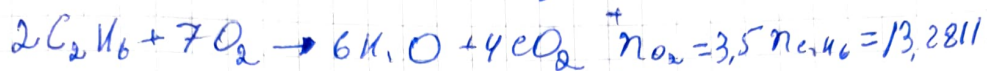
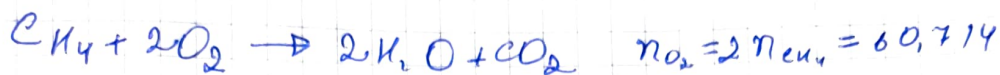
85 л
3,7946 моль

C_3H_8
5%

42,5 л
1,8573 моль

C_4H_{10}
5%

42,5 л
1,8573 моль



$$\Sigma n_{O_2} = 95,81405$$

$$V_{O_2} = n_{O_2} \cdot V_M = 95,81405 \cdot 22,4 \text{ л} = \underline{\underline{2146,23 \text{ л}}}$$

$$V_{O_2} = K V_{\text{смеси}}$$

$$K = \frac{n_{O_2}}{n_{C_2H_4}} \cdot f_{C_2H_4} + \frac{n_{O_2}}{n_{C_2H_6}} \cdot f_{C_2H_6} + \frac{n_{O_2}}{n_{C_3H_8}} \cdot f_{C_3H_8} + \frac{n_{O_2}}{n_{C_4H_{10}}} \cdot f_{C_4H_{10}}$$

$$K = 2 \cdot 80\% + 3,5 \cdot 10\% + 5 \cdot 5\% + 6,5 \cdot 5\%$$

$$K = \underline{\underline{2,525}}$$

$$V_{O_2} = K V_{\text{смеси}}$$

$$V_{\text{смеси}} = 850 \text{ л}$$

$$V_{O_2} = 2,525 \cdot 850 \text{ л}$$

$$V_{O_2} = \underline{\underline{2146,25 \text{ л}}}$$