

APRĒĶINU FORMULAS

1. Vielai $A_a B_b C_c \dots$ $M_{A_a B_b C_c \dots} = a \cdot M_A + b \cdot M_B + c \cdot M_C + \dots$

2. Vielai $A_a B_b C_c \dots$ $w_B = \frac{b \cdot M_B}{M_{A_a B_b C_c \dots}}$

3. $w_1 = \frac{m_1}{\sum m}$, kur $\sum m = m_1 + m_2 + \dots$

4. $\varphi_1 = \frac{V_1}{\sum V}$, kur $\sum V = V_1 + V_2 + \dots$; $\varphi_{O_2 \text{ gais}} = 21 \%$

5. $\chi_1 = \frac{n_1}{\sum n}$, kur $\sum n = n_1 + n_2 + \dots$

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

7. $n = \frac{\sum m \cdot w}{M}$

8. $n = \frac{N}{N_A}$, $N_A \approx 6,02 \cdot 10^{23} \text{ mol}^{-1}$

9. $n = \frac{V}{V_0}$, $V_0 \approx 22,4 \text{ l} \cdot \text{mol}^{-1}$ (n. a.)

10. $n = \frac{\sum V \cdot \varphi}{V_0}$

11. $n = c \cdot V$

12. $n = \frac{V_{\text{sk.}} \cdot \rho_{\text{sk.}} \cdot w}{M}$

13. $\gamma = \frac{m}{V}$

14. $\rho = \frac{m}{V}$, $\rho_{H_2O} = 1000 \text{ kg} \cdot \text{m}^{-3}$ ($t = +4 \text{ }^{\circ}\text{C}$)

15. $\rho = \frac{M}{V_0}$

16. $d = \frac{M_{G_1}}{M_{G_2}}$, $M_{gaisa} \approx 29 \text{ g} \cdot \text{mol}^{-1}$

$$17. \quad \eta = \frac{n_{prakt.}}{n_{teor.}} \quad 18. \quad \eta = \frac{m_{prakt.}}{m_{teor.}} \quad 19. \quad \eta = \frac{N_{prakt.}}{N_{teor.}} \quad 20. \quad \eta = \frac{V_{prakt.}}{V_{teor.}}$$

$$21. [H^+] \cdot [OH^-] = 10^{-14} \text{ mol}^2 \cdot l^{-2}$$

$$22. pH = -\lg[H^+] , \quad pH = -\lg c_{H^+}$$

$$23. \frac{p_1 \cdot V_1}{T_1} = \frac{p_2 \cdot V_2}{T_2}, \quad T \approx 273 + t$$

$$24. p \cdot V = n \cdot R \cdot T , \quad p \cdot V = \frac{m}{M} R \cdot T , \quad R \approx 8,31 \text{ J} \cdot \text{mol}^{-1} \cdot \text{K}^{-1}$$

$$25. v = \frac{\Delta c}{\Delta t}$$

$$26. \text{Pārvērtībai } aA + bB + \dots \quad v = k \cdot [A]^a \cdot [B]^b \dots \quad v = k \cdot c_A^a \cdot c_B^b \dots$$

$$27. v_{t_2} = v_{t_1} \cdot \gamma^{\frac{t_2-t_1}{10}}$$

$$28. \text{Pārvērtībai } aA + bB \rightleftharpoons cC + dD \quad K = \frac{[C]^c \cdot [D]^d}{[A]^a \cdot [B]^b}$$

$$29. \alpha = \frac{N_{disoc.}}{N_{kop.}}$$

$$30. K \approx c \cdot \alpha^2$$

$$31. \Delta H = -Q$$

$$32. \begin{aligned} \text{Pārvērtībai } aA + bB &\rightarrow cC + dD + Q & Q &= (Q_{ras.C} + Q_{ras.D}) - (Q_{ras.A} + Q_{ras.B}) \\ \Delta H &= (H_{ras.C} + H_{ras.D}) - (H_{ras.A} + H_{ras.B}) \end{aligned}$$

$$33. \Delta G = \Delta H - T \cdot \Delta S$$

$$34. n = \frac{I \cdot t}{z \cdot F}, \quad m = \frac{M}{z \cdot F} I \cdot t, \quad F \approx 96500 \text{ C} \cdot \text{mol}^{-1}$$

$$35. E = m \cdot c^2$$