

Avogadrova konštanta	$N_A = 6,02214076 \cdot 10^{23} \text{ mol}^{-1}$ (presne)	
atómová hmotnostná jednotka	$u = 1,66053906660 \cdot 10^{-27} \text{ kg}$	
mólová hmotnosť látky	M	kg mol^{-1}
mólový objem látky	V_m	$\text{m}^3 \text{ mol}^{-1}$
hmotnosť častice (X)	$m_X = \frac{m}{N} = \frac{M}{N_A}$	kg
látkové množstvo látky	$n = \frac{m}{M} = \frac{V}{V_m} = \frac{N}{N_A}$	mol
hustota čistej látky	$\rho = \frac{m}{V}$	kg m^{-3}
hustota zmesi	$\rho' = \frac{m'}{V'}$	kg m^{-3}
hmotnostný zlomok látky v zmesi	$w = \frac{m}{m'} \quad \sum_i w_i = 1$	–
objemový zlomok látky v zmesi	$\phi = \frac{V}{V'} \quad \sum_i \phi_i = 1^*$	–
mólový zlomok látky v zmesi	$x = \frac{n}{n'} \quad \sum_i x_i = 1$	–
hmotnostná koncentrácia látky v zmesi	$\underline{\rho} = \frac{m}{V'} \quad \sum_i \underline{\rho}_i = \rho'$	kg m^{-3}
látková koncentrácia (molarita) látky v zmesi	$c = \frac{n}{V'}$	$\text{mol m}^{-3},$ $\text{mol dm}^{-3} \equiv \text{M}$
molalita látky v zmesi	$\underline{m} = \frac{n}{m_S}^{**}$ $\underline{m}_S = \frac{n_S}{m_S} = \frac{1}{M_S} = \text{const}$	mol kg^{-1}

štandardné podmienky	$p^\theta = 10^5 \text{ Pa}, T^\theta = 298,15 \text{ K}$	
normálne podmienky	$p_n = 10^5 \text{ Pa}, T_n = 273,15 \text{ K}$	
normálny mólový objem ideálneho plynu	$V_{mn} = 22,414 \text{ dm}^3 \text{ mol}^{-1}$	
univerzálna plynová konštanta	$R = 8,31446261815324 \text{ J mol}^{-1} \text{ K}^{-1}$	
stavová rovnica ideálneho plynu	$pV = nRT$	
priemerná mólova hmotnosť zmesi	$\bar{M} = \frac{\sum_i x_i M_i}{\sum_i x_i} = \sum_i (x_i M_i)$ $\bar{M} = \frac{\sum_i w_i}{\sum_i \left(\frac{w_i}{M_i} \right)} = \frac{1}{\sum_i \left(\frac{w_i}{M_i} \right)}$ $\bar{M} = \frac{\sum_i c_i M_i}{\sum_i c_i}$ $\bar{M} = \frac{\sum_i \underline{\rho}_i}{\sum_i \left(\frac{\underline{\rho}_i}{M_i} \right)} = \frac{\rho'}{\sum_i \left(\frac{\underline{\rho}_i}{M_i} \right)}$ $\bar{M} = \frac{\sum_i \phi_i M_i}{\sum_i \left(\frac{\phi_i M_i}{M_i} \right)} = \frac{\rho'}{\sum_i \left(\frac{\phi_i}{M_i} \right)}$ $\bar{M} = \frac{\sum_i \underline{m}_i M_i}{\sum_i \underline{m}_i}$	kg mol^{-1}
rozsah chemickej reakcie	$d\xi = \frac{dn}{\nu} \Leftrightarrow \Delta\xi = \frac{\Delta n}{\nu}^{***}$	mol

* Platí len pre ideálne zmiešavanie, tj. keď $V' = \sum V_i$.

** Molalita sa niekedy označuje b . S je rozpúšťadlo (angl. *solvent*).

*** Stechiometrický koeficient ν reaktantov je záporný, produktov kladný.

	w	φ	x	$\underline{\rho}$	c	\underline{m}
$w =$	$=$	$w = \frac{\varphi \rho}{\sum_i (\varphi_i \rho_i)}$ $w = \frac{\varphi \rho}{\rho'}$	$w = \frac{xM}{\sum_i (x_i M_i)}$ $w = \frac{xM}{\bar{M}}$	$w = \frac{\rho}{\rho'}$	$w = \frac{cM}{\rho'}$	$w = \frac{\underline{m}M}{\sum_i (\underline{m}_i M_i)}$ $w = \frac{\underline{m}M}{\bar{M} \sum_i \underline{m}_i}$ $\underline{m}_S = \frac{1}{M_S}$
$\varphi =$	$\varphi = \frac{w\rho'}{\rho}$	$=$	$\varphi = \frac{xM \rho'}{\rho \sum_i (x_i M_i)}$ $\varphi = \frac{xM \rho'}{\rho \bar{M}}$	$\varphi = \frac{\rho}{\rho}$	$\varphi = \frac{cM}{\rho}$	$\varphi = \frac{\underline{m}M \rho'}{\rho \sum_i (\underline{m}_i M_i)}$ $\varphi = \frac{\underline{m}M \rho'}{\rho \bar{M} \sum_i \underline{m}_i}$
$x =$	$x = \frac{w}{M \sum_i \left(\frac{w_i}{M_i} \right)}$ $x = \frac{w\bar{M}}{M}$	$x = \frac{\varphi \rho}{M \sum_i \left(\frac{\varphi_i \rho_i}{M_i} \right)}$ $x = \frac{\varphi \rho \bar{M}}{M \rho'}$	$=$	$x = \frac{\rho}{M \sum_i \left(\frac{\rho_i}{M_i} \right)}$ $x = \frac{\rho \bar{M}}{\rho' M_L}$	$x = \frac{c}{\sum_i c_i}$	$x = \frac{\underline{m}}{\sum_i \underline{m}_i}$
$\underline{\rho} =$	$\underline{\rho} = w\rho'$	$\underline{\rho} = \varphi \rho$	$\underline{\rho} = \frac{xM \rho'}{\sum_i (x_i M_i)}$ $\underline{\rho} = \frac{xM \rho'}{\bar{M}}$	$=$	$\underline{\rho} = cM$	$\underline{\rho} = \underline{m}M \underline{\rho}_S$
$c =$	$c = \frac{w\rho'}{M}$	$c = \frac{\varphi \rho}{M}$	$c = \frac{x\rho'}{\sum_i (x_i M_i)}$ $c = \frac{x\rho'}{\bar{M}}$	$c = \frac{\rho}{M}$	$=$	$c = \frac{\underline{m}\rho'}{\sum_i (\underline{m}_i M_i)}$ $c = \frac{\underline{m}\rho'}{\bar{M} \sum_i \underline{m}_i}$
$\underline{m} =$	$\underline{m} = \frac{w}{M w_S}$	$\underline{m} = \frac{\varphi \rho}{M \varphi_S \rho_S}$	$\underline{m} = \frac{x}{M_S x_S}$	$\underline{m} = \frac{\rho}{M \underline{\rho}_S}$	$\underline{m} = \frac{c}{\rho' - \sum_{i \neq S} (c_i M_i)}$	$=$

S je rozpúšťadlo (angl. solvent).