

Parameter	pH <sub>x</sub> vs. pH <sub>m</sub>	pH <sub>m</sub> vs. pH <sub>c</sub>	pH <sub>x</sub> vs. pH <sub>c</sub>
Activity coefficient <sup>a</sup>	$\gamma_H = f_H \frac{x_H}{m_H M_s} \quad (4)$	$\gamma_H = 1000 \frac{\text{dm}^3}{\text{m}^3} \frac{c_H y_H}{m_H \rho_0} \quad (5)$	$f_H = y_H 1000 \frac{\text{dm}^3}{\text{m}^3} \frac{M_s c_H}{\rho_0 x_H} \quad (6)$
Concentration <sup>b</sup>	$x_H = \frac{m_H}{\sum m_i + \frac{1}{M_s}} \quad (7)$	$c_H = \frac{m_H}{1000 \frac{\text{dm}^3}{\text{m}^3} \frac{\sum m_i M_i + 1}{\rho_{\text{sln}}}} \quad (8)$	$x_H = \frac{M_s c_H}{M_s \sum c_i + 0.001 \frac{\text{m}^3}{\text{dm}^3} \rho_{\text{sln}} - \sum c_i M_i} \quad (9)$
pH <sup>c</sup>	$\text{pH}_x - \text{pH}_m = -\log_{10}[M_s m^0] \quad (10)$	$\text{pH}_m - \text{pH}_c = -\log_{10} \frac{c^0 1000 \text{dm}^3 / \text{m}^3}{m^0 \rho_0} \quad (11)$	$\text{pH}_x - \text{pH}_c = -\log_{10} \frac{1000 \text{dm}^3 / \text{m}^3 M_s c^0}{\rho_0} \quad (12)$