

standard equilibrium constant, K° , K

Synonym: thermodynamic equilibrium constant

Quantity defined by $K^\circ = e^{-\Delta_r G^\circ / RT}$ where $\Delta_r G^\circ$ is the standard reaction Gibbs energy, R the gas constant and T the thermodynamic temperature. Some chemists prefer the name thermodynamic equilibrium constant and the symbol K .

Source:

Green Book, 2nd ed., p. 50

See also:

PAC, 1994, 66, 533 (*Standard quantities in chemical thermodynamics. Fugacities, activities and equilibrium constants for pure and mixed phases (IUPAC Recommendations 1994)*) on page 548