

**transfer activity coefficient,  $\chi$** 

A term used to quantify the difference in the free energy of a solute ion in two different standard states often in two different liquid phases. The relationship is  $\Delta_t G^0 = \nu RT \ln \chi$  where  $\Delta_t G^0$  is the transfer Gibbs energy and  $\nu$  is the number of ions in the solute.

Notes:

1. It should not be confused with the mass transfer coefficient which represents the specific rate of transfer of a species from one phase to another.
2. It does not necessarily imply the physical transfer of a solute between two liquid phases.

See also *partition constant*.

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