Annex: Symbols used and the units associated with them.

Normal letters

a	Activity	Mole dm^{-3}
A	Debye-Huckel term	$Mole^{0.5}$ $kg^{0.5}$
b	Term in the denominator of the extended Debye-Huckel equation	
B	Term in the SIT or Pitlzer equation	$Mole^{-1}$ kg
c	Concentration	Mole dm^{-3}
C	Term in the polynomial of the Pitlzer equation	$Mole^{-2}$ kg^{2}
C	Constant containing activity factors in the organic phase together with chloride concentrations	Varies
D	Term in the polynomial of the Pitlzer equation	$Mole^{-3}$ kg^{3}
D_M	Distribution ratio	Unitless
E	Energy	Joules
f	Activity function	Unitless
I	Ionic strength	mole dm^{-3}
I_m	Ionic strength expressed using molality	mole kg^{-1}
k	Miscellaneous constant	*as needed*
k’	Miscellaneous constant	*as needed*
k_b	Boltzmann constant	m^2 kg s^{-2} K^{-1}
K_n	Thermodynamic stability constant	mol^{-1} dm^3
K_d	Distribution constant	Unitless
K_{ex}	Extraction constant	Unitless
K_s	Sechenov constant	Moles dm^{-3}
m	Molality of substance	Moles kg^{-1}
m_k	Molality of species k	Moles kg^{-1}
n	Number of ions in a given volume	Ions m^{-3}
r	Radius	m
R	Gas constant	J mol^{-1} K^{-1}
T	Temperature	Kelvin
z	Charge on an ion (multiples of the electronic charge)	e

Greek letters

β	Cumulative thermodynamic stability constant	Varies
γ	Activity coefficient	Unitless
ΔX	Change in X, X is used here as a placeholder	None
ε(j,k)	SIT parameter for the interaction of ions j and k	$mole^{-1}$ dm^3
ε_0	Vacuum permittivity	C V^{-1} m^{-1}
ε_r	Relative	Unitless
μ	Chemical potential	J mol^{-1}
θ	Deep eutectic solvent volume fraction	Unitless
Ψ	Constant to take into account fraction of lower phase which is not water	Unitless