Supporting information for: Thermodynamics of strong aqueous electrolyte solutions at $t = 25$ °C described by the Hückel equations

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Table S1: Lack-of-fit statistics (see main article for definition) for regression of physicochemical property values at $t = 25$ °C: A – the Hückel equation model where $\dot{a}$ and its derivatives with respect to temperature and pressure are adjustable model parameters; B – the model where $\dot{a}$ is electrolyte-specific but independent of temperature and pressure; C – $\dot{a}$ has the value 1.5 (kg mol^{-1})$^{1/2}$ for all electrolytes (as in the SIT equation).

Electrolyte	A	B	C
HCl	0.03	0.03	0.34
HNO_3	0.06	0.07	0.36
$HClO_4$	0.28	0.57	1.45
LiOH	0.37	0.38	42.10
LiCl	0.05	0.06	0.51
LiBr	0.28	0.31	1.13
NaOH	0.05	0.11	1.47
NaF	0.01	0.01	0.30
NaCl	0.04	0.06	0.94

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Table S1: Continued

Electrolyte	A	B	C
NaBr	0.07	0.09	0.36
NaI	0.05	0.07	0.09
$NaNO_3$	0.04	0.25	4.99
$NaClO_4$	0.04	0.31	0.72
Na_2SO_4	0.11	0.49	6.27
Na(Acetate)	0.05	0.08	0.33
$NaClO_3$	0.04	0.16	1.95
KOH	0.08	0.09	5.04
KF	0.08	0.09	2.43
KCl	0.02	0.04	1.35
KBr	0.01	0.06	0.80
KI	0.02	0.08	0.28
KNO_3	0.13	1.31	22.30
K_2SO_4	0.40	0.80	18.60
RbF	0.06	0.09	0.35
RbCl	0.07	0.07	8.35
RbBr	0.01	0.03	3.60
RbI	0.01	0.03	9.19
CsF	0.05	0.04	0.05
CsCl	0.05	0.19	20.60
NH_4Cl	0.03	0.06	1.72
NH_4NO_3	0.07	0.49	13.20
$BaCl_2$	0.23	0.25	0.79
$CaCl_2$	0.06	0.07	0.46
$CoCl_2$	0.25	0.28	0.78

Table S1: Continued

Electrolyte	A	B	C
$LaCl_3$	1.18	1.21	7.04
$La(NO_3)_3$	0.73	1.28	8.79
$La(ClO_4)_3$	0.38	2.58	15.80
$MgCl_2$	0.21	0.23	0.99
$Mg(NO_3)_2$	0.31	0.45	0.46
$MnCl_2$	0.54	1.73	1.74
$Mn(ClO_4)_2$	0.23	0.34	1.99
$NiCl_2$	0.11	0.14	0.38
$SrCl_2$	0.15	0.18	0.39
$Sr(NO_3)_2$	0.65	1.70	1.83
$NdCl_3$	0.29	0.35	2.45
$Nd(NO_3)_3$	0.32	4.76	5.51
$Nd(ClO_4)_3$	0.31	3.74	12.80
$SmCl_3$	0.29	0.34	3.36
$Sm(NO_3)_3$	1.26	12.00	13.10
$Sm(ClO_4)_3$	0.83	4.58	14.30
$EuCl_3$	0.39	0.44	4.57
$GdCl_3$	0.60	0.64	4.04
$Gd(NO_3)_3$	0.23	3.89	5.66
$Gd(ClO_4)_3$	0.31	2.49	8.83
$PrCl_3$	0.71	0.75	7.86
$Pr(NO_3)_3$	0.34	3.57	4.61
$Pr(ClO_4)_3$	0.83	4.22	13.00