

Supplemental Table S2. Experimental results for solubility of borax in Na₂SO₄ solutions at 25 ± 0.5 °C.

Experimental No.	Supporting Medium Na ₂ SO ₄ (molal)	Experimental time (day)	pH _m	Molal total boron concentrations, m _{ΣB} , in equilibrium with sodium tetraborate
Nd(OH) ₃ -B-0.01SO ₄ -1	0.010	454	9.21	0.529
Nd(OH) ₃ -B-0.01SO ₄ -2	0.010	454	9.22	0.518
Nd(OH) ₃ -B-0.1SO ₄ -1	0.10	454	9.08	0.420
Nd(OH) ₃ -B-0.1SO ₄ -2	0.10	454	9.07	0.407
Nd(OH) ₃ -B-0.5SO ₄ -1	0.5	454	8.73	0.226
Nd(OH) ₃ -B-0.5SO ₄ -2	0.5	454	8.73	0.273
Nd(OH) ₃ -B-1.0SO ₄ -1	1.0	454	8.55	0.232
Nd(OH) ₃ -B-1.0SO ₄ -2	1.0	454	8.55	0.230
Nd(OH) ₃ -B-1.5SO ₄ -1	1.5	454	8.55	0.254
Nd(OH) ₃ -B-1.5SO ₄ -2	1.5	454	8.55	0.222
Nd(OH) ₃ -B-1.8SO ₄ -1	1.8	454	8.66	0.231
Nd(OH) ₃ -B-1.8SO ₄ -2	1.8	454	8.66	0.231
Nd(OH) ₃ -B-0.01SO ₄ -1	0.010	762	9.22	0.527
Nd(OH) ₃ -B-0.01SO ₄ -2	0.010	762	9.19	0.536
Nd(OH) ₃ -B-0.1SO ₄ -1	0.10	762	9.04	0.447
Nd(OH) ₃ -B-0.1SO ₄ -2	0.10	762	9.04	0.455
Nd(OH) ₃ -B-0.5SO ₄ -1	0.5	762	8.71	0.253
Nd(OH) ₃ -B-0.5SO ₄ -2	0.5	762	8.71	0.258
Nd(OH) ₃ -B-1.8SO ₄ -1	1.8	762	8.63	0.212
Nd(OH) ₃ -B-1.8SO ₄ -2	1.8	762	8.63	0.208
Nd(OH) ₃ -B-0.5SO ₄ -1	0.5	791	8.74	0.261
Nd(OH) ₃ -B-0.5SO ₄ -2	0.5	791	8.73	0.267
Nd(OH) ₃ -B-1.0SO ₄ -1	1.0	791	8.56	0.224
Nd(OH) ₃ -B-1.0SO ₄ -2	1.0	791	8.56	0.233
Nd(OH) ₃ -B-1.5SO ₄ -2	1.5	791	8.56	0.207
Nd(OH) ₃ -B-1.8SO ₄ -2	1.8	791	8.65	0.203
Nd(OH) ₃ -B-0.01SO ₄ -1	0.010	811	9.33	0.551
Nd(OH) ₃ -B-0.01SO ₄ -2	0.010	811	9.23	0.553
Nd(OH) ₃ -B-0.1SO ₄ -1	0.10	811	9.09	0.463
Nd(OH) ₃ -B-0.1SO ₄ -2	0.10	811	9.09	0.467
Nd(OH) ₃ -B-0.5SO ₄ -1	0.5	811	8.74	0.303
Nd(OH) ₃ -B-0.5SO ₄ -2	0.5	811	8.75	0.296
Nd(OH) ₃ -B-1.0SO ₄ -1	1.0	811	8.56	0.254
Nd(OH) ₃ -B-1.0SO ₄ -2	1.0	811	8.57	0.247

$\text{Nd(OH)}_3\text{-B-1.5SO}_4\text{-1}$	1.5	811	8.56	0.227
$\text{Nd(OH)}_3\text{-B-1.5SO}_4\text{-2}$	1.5	811	8.56	0.218
$\text{Nd(OH)}_3\text{-B-1.8SO}_4\text{-1}$	1.8	811	8.65	0.205
$\text{Nd(OH)}_3\text{-B-1.8SO}_4\text{-2}$	1.8	811	8.65	0.215