

Supporting Information

Prediction of metastable zone widths of ammonium sulphate: Modification of the nucleation potential model in an electrolyte system

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List of table and figure captions

Table S1. Detailed information reported in the literature on the increase in the MSZWs with increasing saturation temperature.

Table S2. Detailed information reported in the literature on the decrease in the MSZWs with increasing saturation temperature.

Table S3. Viscosity of ammonium sulphate solutions at different concentrations adapted from Mullin et al.¹ (Fig. 3)

Table S1. Detailed information reported in the literature on the increase in the MSZWs with increasing saturation temperature.

No.	Reference	Year	Solute	Solvents
1	Medina-Galván et al. ²	2022	acetylsalicylic acid	ethanol
2	Xu et al. ³	2021	benzoic acid	chloroform
3	Su et al. ⁴	2018	sodium sulfate	water
4	Nemdili et al. ⁵	2016	citric acid anhydrate	water
5	Zhang et al. ⁶	2015	lovastatin	methanol, ethanol, and acetone
6	Mealey et al. ⁷	2015	salicylic acid	ethyl acetate
7	Mielniczek-Brzóska et al. ⁸	2014	potassium nitrate	water
8	Zhang et al. ⁹	2012	DL-tartaric acid	water
9	Gharsallaoui et al. ¹⁰	2008	maltitol	water

Table S2. Detailed information reported in the literature on the decrease in the MSZWs with increasing saturation temperature.

No.	Reference	Year	Solute	Solvents
1	Wang et al. ¹¹	2022	adipic acid	water, methanol, and n-butanol
2	Wang et al. ¹²	2022	p-methoxybenzoic acid	ethanol-water
3	Mohod et al. ¹³	2022	copper (II) sulphate pentahydrate	water
4	Maharana et al. ¹⁴	2022	pyrazinamide	acetone
5	Gu et al. ¹⁵	2022	metformin hydrochloride	Water, methanol, ethanol, and n-propanol
6	Cao et al. ¹⁶	2022	isosorbide 5-mononitrate	n-propanol, n-butanol, n-propyl acetate, and n-butyl acetate
7	Zhao et al. ¹⁷	2021	nicotinic acid	ethanol
8	Shiau ¹⁸	2021	L-glycine	water
9	Yang et al. ¹⁹	2020	ethyl vanillin	ethanol, n-propanol, and n-butanol
10	Zhang et al. ²⁰	2019	urea phosphate	water
11	Huang et al. ²¹	2019	glutaric acid	acetic acid
12	Bian et al. ²²	2019	sodium nitrate	water (with additives)
13	Xiong et al. ²³	2018	aspirin	acetic acid-acetic anhydride

14	Shiau ²⁴	2018	glycine	water
15	Mastan et al. ²⁵	2017	L-phenylalanine	water
16	Luo et al. ²⁶	2017	potassium sulfate	water
17	Liu et al. ²⁷	2017	glycine barium bromo chloride	water
18	Xu et al. ²⁸	2016	eszopiclone	butyl acetate
19	Wang et al. ²⁹	2016	gestodene	ethanol
20	Wang et al. ³⁰	2016	sodium dichromate dihydrate	water
21	Ntuk et al. ³¹	2016	aluminium hydroxyfluoride hydrate	water
22	Yuan et al. ³²	2015	DL-malic acid	water
23	You et al. ³³	2015	ammonium aluminum sulfate dodecahydrate	water
24	Yang ³⁴	2015	butyl paraben	ethanol
25	Sangwal et al. ³⁵	2014	ammonium oxalate	water-acetone
26	Qian et al. ³⁶	2014	SrCl ₂ ·6H ₂ O	water
27	Zhang et al. ³⁷	2011	triethanolamine hydrochloride	water, ethanol- water, and HCl- water
28	Pattanaboonmee et al. ³⁸	2011	ammonium dihydrogen orthophosphate	water
29	Sangwal ³⁹	2009	potassium tetraborate	water
30	Sangwal ⁴⁰	2009	nitrotriazolinone	water
31	Gao et al. ⁴¹	2009	glycine	water
32	Sahin et al. ⁴²	2007	maltitol	water

Table S3. Viscosity of ammonium sulphate solutions at different concentrations adapted from Mullin et al.¹ (Fig. 3)

Concentration (kg/kg water)	Temperature (°C)	Viscosity (10 ³ N sec/m ²)
	20	1.08
0.2	25	1.23
	30	1.40
	20	1.42
0.4	25	1.60
	30	1.79

	20	1.86
0.6	25	2.08
	30	2.32

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