

Correction

Experimental Densities and Excess Volumes for Binary Mixtures Containing Propionic Acid, Acetone, and Water from 283.15 K to 323.15 K at Atmospheric Pressure. A. Estrada-Baltazar, A. De León-Rodríguez, K. R. Hall, M. Ramon-Estrada, and G. A. Iglesias-Silva*, *J. Chem. Eng. Data* 2003, 48, 1425–1431.

In our paper,¹ we erroneously calculated the excess volumes for the binary systems composed of propionic acid, water, and acetone. Tables 1–3 contain the correct excess volumes for the systems propionic acid + water, acetone + water, and acetone + propionic acid, respectively. Figure 1 presents a comparison of our excess volumes with those from Iglesias et al.² at 298.15 K. We apologize for our calculation mistake.

Literature Cited

- (1) Estrada-Baltazar, A.; De León-Rodríguez, A.; Hall, K. R.; Ramos-Estrada, M.; Iglesias-Silva, G. A. Experimental Densities and Excess Volumes for Binary Mixtures Containing Propionic Acid, Acetone, and Water from 283.15 K to 323.15 K at Atmospheric Pressure. *J. Chem. Eng. Data* 2003, 48, 1425–1431.
- (2) Iglesias, M.; Orge, B.; Tojo, J. Refractive Indices, Densities, and Excess Properties on Mixing of the Systems Acetone + Methanol + Water and Acetone + Methanol + 1-Butanol at 298.15 K. *Fluid Phase Equilib.* 1996, 126, 203–223.

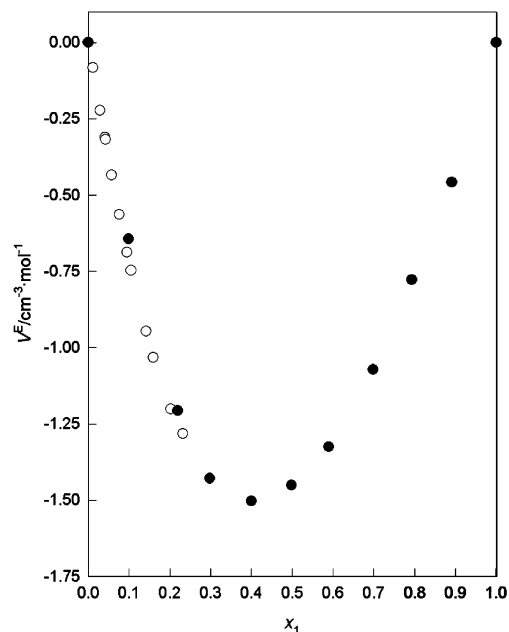


Figure 1. Excess volume of acetone (1) + water (2) as a function of mole fraction at 298.15 K. This work: ●. Iglesias et al.: ○.

Table 1. Excess Volumes for the Propionic Acid (1) + Water (2) Mixture

x_1	T	V^E	T	V^E	T	V^E	T	V^E	T	V^E
	K	cm ³ ·mol ⁻¹	K	cm ³ ·mol ⁻¹	K	cm ³ ·mol ⁻¹	K	cm ³ ·mol ⁻¹	K	cm ³ ·mol ⁻¹
1.0000	283.151	0.000000	288.149	0.000000	293.146	0.000000	298.146	0.000000	303.145	0.000000
0.8915	283.155	-0.424896	288.144	-0.429793	293.146	-0.435296	298.146	-0.440742	303.147	-0.446068
0.7965	283.153	-0.712051	288.148	-0.717530	293.147	-0.725190	298.144	-0.732285	303.145	-0.739637
0.6974	283.151	-0.938101	288.149	-0.942423	293.145	-0.947829	298.145	-0.953677	303.149	-0.960156
0.5989	283.153	-1.087300	288.148	-1.087599	293.147	-1.089461	298.147	-1.092361	303.145	-1.096163
0.5008	283.150	-1.161285	288.148	-1.156638	293.146	-1.153764	298.145	-1.152006	303.145	-1.149859
0.4007	283.152	-1.161066	288.144	-1.151065	293.146	-1.143102	298.146	-1.136893	303.145	-1.132159
0.3012	283.152	-1.075391	288.148	-1.054789	293.145	-1.044944	298.144	-1.034757	303.145	-1.029546
0.2029	283.153	-0.908483	288.148	-0.890460	293.145	-0.875091	298.145	-0.862019	303.148	-0.850732
0.1298	283.151	-0.627833	288.148	-0.619203	293.146	-0.613439	298.147	-0.608624	303.145	-0.605112
0.0000	283.150	0.000000	288.148	0.000000	293.145	0.000000	298.146	0.000000	303.145	0.000000
1.0000	308.147	0.000000	313.145	0.000000	318.145	0.000000	323.150	0.000000		
0.8915	308.146	-0.451625	313.145	-0.457315	318.145	-0.462117	323.144	-0.467196		
0.7965	308.145	-0.747127	313.146	-0.754698	318.145	-0.762058	323.144	-0.769240		
0.6974	308.146	-0.967042	313.145	-0.974315	318.145	-0.981663	323.149	-0.988465		
0.5989	308.146	-1.100493	313.145	-1.105509	318.145	-1.110853	323.144	-1.115789		
0.5008	308.147	-1.117499	313.145	-1.151858	318.145	-1.149669	323.147	-1.155866		
0.4007	308.149	-1.128663	313.146	-1.126140	318.145	-1.124809	323.145	-1.123116		
0.3012	308.149	-1.022896	313.145	-1.017002	318.145	-1.012432	323.145	-1.007430		
0.2029	308.146	-0.841031	313.145	-0.832728	318.145	-0.826030	323.145	-0.818772		
0.1298	308.149	-0.602656	313.145	-0.601238	318.145	-0.601171	323.144	-0.600158		
0.0000	308.147	0.000000	313.146	0.000000	318.145	0.000000	323.145	0.000000		

Table 2. Excess Volumes for the Acetone (1) + Water (2) Mixture

x_1	T	V^E	T	V^E	T	V^E	T	V^E	T	V^E
	K	cm ³ ·mol ⁻¹	K	cm ³ ·mol ⁻¹	K	cm ³ ·mol ⁻¹	K	cm ³ ·mol ⁻¹	K	cm ³ ·mol ⁻¹
1.0000	283.154	0.000000	288.149	0.000000	293.146	0.000000	298.146	0.000000	303.145	0.000000
0.8916	283.154	-0.451452	288.149	-0.453439	293.146	-0.455805	298.145	-0.458410	303.145	-0.461200
0.7934	283.151	-0.766141	288.148	-0.769431	293.146	-0.773454	298.145	-0.777797	303.145	-0.782976
0.6984	283.151	-1.056024	288.150	-1.060499	293.146	-1.066220	298.145	-1.072703	303.145	-1.080360
0.5903	283.152	-1.309176	288.149	-1.313062	293.146	-1.318995	298.144	-1.326266	303.145	-1.335113
0.4986	283.151	-1.439623	288.149	-1.441228	293.146	-1.445275	298.146	-1.451243	303.145	-1.459178
0.3998	283.151	-1.502046	288.148	-1.499895	293.145	-1.500593	298.145	-1.503631	303.144	-1.509237
0.2973	283.152	-1.437552	288.148	-1.431616	293.145	-1.428835	298.145	-1.428710	303.144	-1.431292
0.2193	283.152	-1.225824	288.148	-1.216456	293.145	-1.210328	298.145	-1.206952	303.145	-1.206145
0.0988	283.152	-0.663248	288.149	-0.654407	293.146	-0.648028	298.144	-0.643797	303.146	-0.641362
0.0000	283.150	0.000000	288.148	0.000000	293.145	0.000000	298.146	0.000000	303.145	0.000000

Table 2 (Continued)

x_1	T	V^E	T	V^E	T	V^E	T	V^E	T	V^E
	K	cm ³ ·mol ⁻¹	K	cm ³ ·mol ⁻¹	K	cm ³ ·mol ⁻¹	K	cm ³ ·mol ⁻¹	K	cm ³ ·mol ⁻¹
1.0000	308.146	0.000000	313.145	0.000000	318.145	0.000000	323.144	0.000000		
0.8916	308.146	-0.464379	313.145	-0.467226	318.145	-0.470842	323.144	-0.474121		
0.7934	308.149	-0.788427	313.145	-0.794105	318.145	-0.800740	323.143	-0.807190		
0.6984	308.146	-1.088913	313.145	-1.098249	318.149	-1.108651	323.145	-1.119057		
0.5903	308.145	-1.345349	313.145	-1.357106	318.148	-1.370467	323.146	-1.384421		
0.4986	308.149	-1.469009	313.146	-1.480574	318.145	-1.495212	323.145	-1.510409		
0.3998	308.149	-1.517050	313.145	-1.526953	318.145	-1.539700	323.144	-1.554255		
0.2973	308.149	-1.436172	313.145	-1.443372	318.145	-1.453559	323.144	-1.464632		
0.2193	308.147	-1.207711	313.145	-1.211410	318.145	-1.217934	323.148	-1.225038		
0.0988	308.146	-0.640874	313.145	-0.642283	318.146	-0.645298	323.146	-0.647779		
0.0000	308.147	0.000000	313.146	0.000000	318.145	0.000000	323.145	0.000000		

Table 3. Excess Volumes for the Acetone (1) + Propionic Acid (2) Mixture

x_1	T	V^E	T	V^E	T	V^E	T	V^E	T	V^E
	K	cm ³ ·mol ⁻¹	K	cm ³ ·mol ⁻¹	K	cm ³ ·mol ⁻¹	K	cm ³ ·mol ⁻¹	K	cm ³ ·mol ⁻¹
1.0000	283.154	0.000000	288.149	0.000000	293.146	0.000000	298.146	0.000000	303.145	0.000000
0.8987	283.151	-0.357836	288.149	-0.372095	293.146	-0.387002	298.145	-0.402285	303.145	-0.418410
0.7703	283.150	-0.681670	288.149	-0.707796	293.147	-0.734719	298.145	-0.762599	303.145	-0.791792
0.6887	283.151	-0.758080	288.149	-0.787445	293.147	-0.817905	298.145	-0.849445	303.145	-0.882398
0.6030	283.153	-0.815432	288.148	-0.846247	293.147	-0.878775	298.146	-0.912513	303.143	-0.947766
0.5001	283.152	-0.799310	288.148	-0.830962	293.146	-0.863761	298.145	-0.897676	303.145	-0.932968
0.4011	283.150	-0.729664	288.148	-0.759186	293.146	-0.789946	298.145	-0.821509	303.145	-0.854246
0.3046	283.151	-0.619423	288.148	-0.646422	293.146	-0.673396	298.146	-0.700978	303.145	-0.729569
0.1991	283.151	-0.451848	288.149	-0.471289	293.146	-0.491312	298.145	-0.512247	303.145	-0.533428
0.1014	283.151	-0.258539	288.149	-0.269890	293.146	-0.281657	298.146	-0.293698	303.145	-0.305991
0.0000	283.151	0.000000	288.149	0.000000	293.146	0.000000	298.146	0.000000	303.145	0.000000
1.0000	308.146	0.000000	313.145	0.000000	318.145	0.000000	323.144	0.000000		
0.8987	308.148	-0.435510	313.145	-0.453088	318.145	-0.472036	323.145	-0.492400		
0.7703	308.148	-0.822356	313.145	-0.854050	318.145	-0.887810	323.144	-0.923252		
0.6887	308.149	-0.916646	313.146	-0.952773	318.145	-0.990823	323.148	-1.030754		
0.6030	308.146	-0.984762	313.145	-1.023329	318.145	-1.063662	323.146	-1.106141		
0.5001	308.148	-0.969845	313.145	-1.007905	318.145	-1.048148				
0.4011	308.148	-0.888426	313.146	-0.924007	318.145	-0.961091	323.144	-0.999591		
0.3046	308.150	-0.759332	313.146	-0.790077	318.145	-0.821929	323.144	-0.855198		
0.1991	308.148	-0.555773	313.146	-0.578554	318.145	-0.602060	323.144	-0.626580		
0.1014	308.146	-0.318562	313.145	-0.332034	318.145	-0.345613	323.148	-0.359472		
0.0000	308.147	0.000000	313.145	0.000000	318.145	0.000000	323.148	0.000000		

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