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The heat capacities and critical behaviors of binary ionic solutions

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Table 1 A part of data of the isobaric heat capacity per unit volume at the critical composition and their uncertainties $\delta C_p V^{-1}$ at different temperatures for {(1-x_c) 1,2-butanediol + x_c [C_4mim][BF_4]} (T_c=298.716 K)

T (K)	C_pV^{-1} (J·cm^{-3}·K^{-1})	δC_pV^{-1} (J·cm^{-3}·K^{-1})	T (K)	C_pV^{-1} (J·cm^{-3}·K^{-1})	δC_pV^{-1} (J·cm^{-3}·K^{-1})	T (K)	C_pV^{-1} (J·cm^{-3}·K^{-1})	δC_pV^{-1} (J·cm^{-3}·K^{-1})
337.863	2.402	0.020	317.222	2.493	0.026	302.601	2.551	0.033
337.234	2.395	0.020	316.596	2.493	0.026	302.316	2.559	0.033
336.609	2.432	0.021	315.971	2.494	0.027	302.030	2.563	0.034
335.982	2.466	0.022	315.346	2.496	0.027	301.745	2.569	0.034
335.358	2.477	0.022	314.720	2.496	0.027	301.459	2.565	0.034
334.732	2.480	0.022	314.095	2.498	0.027	301.174	2.585	0.035
334.107	2.482	0.023	313.470	2.499	0.027	300.888	2.585	0.035
333.481	2.483	0.023	312.844	2.500	0.028	300.602	2.593	0.035
332.856	2.485	0.023	312.218	2.500	0.028	300.317	2.610	0.036
332.230	2.484	0.023	311.593	2.502	0.028	300.031	2.634	0.036
331.605	2.482	0.023	310.968	2.503	0.028	299.746	2.641	0.037
330.979	2.485	0.023	310.343	2.505	0.028	299.460	2.655	0.037
330.354	2.484	0.023	309.717	2.507	0.029	299.174	2.685	0.038
329.729	2.484	0.023	309.092	2.509	0.029	298.888	2.766	0.041
329.103	2.484	0.024	308.467	2.512	0.029	298.603	3.463	0.063
328.478	2.484	0.024	307.742	2.563	0.032	298.317	3.270	0.057
327.852	2.484	0.024	307.458	2.537	0.031	298.031	3.238	0.056
327.228	2.484	0.024	307.172	2.526	0.031	297.746	3.130	0.053
326.602	2.484	0.024	306.886	2.526	0.031	297.460	3.136	0.053
325.976	2.486	0.024	306.601	2.523	0.031	297.175	3.118	0.053
325.351	2.486	0.024	306.315	2.524	0.031	296.889	3.078	0.052
324.726	2.487	0.024	306.030	2.521	0.031	296.603	3.064	0.051
324.101	2.484	0.025	305.744	2.526	0.031	296.318	3.025	0.050
323.475	2.487	0.025	305.458	2.524	0.031	296.032	3.003	0.050
322.850	2.487	0.025	305.173	2.532	0.032	295.747	2.992	0.050
322.224	2.487	0.025	304.887	2.535	0.032	295.461	2.975	0.049
321.599	2.488	0.025	304.601	2.540	0.032	295.175	2.953	0.049
320.974	2.488	0.025	304.316	2.544	0.032	294.889	2.942	0.048
320.349	2.487	0.025	304.030	2.539	0.032	294.604	2.928	0.048
319.723	2.488	0.026	303.744	2.542	0.032	294.318	2.936	0.049
319.097	2.490	0.026	303.459	2.545	0.033	294.032	2.909	0.048
318.472	2.491	0.026	303.173	2.542	0.033	293.747	2.889	0.047
317.847	2.492	0.026	302.888	2.543	0.033			

Table 2 A part of data of the isobaric heat capacity per unit volume at the critical composition and their uncertainties $\delta C_p V^{-1}$ at different temperatures for {(1-x_c) 1-pentanol + x_c [C_8mim][BF_4]} (T_c=291.455 K)

T (K)	C_pV^{-1} (J·cm^{-3}·K^{-1})	δC_pV^{-1} (J·cm^{-3}·K^{-1})	T (K)	C_pV^{-1} (J·cm^{-3}·K^{-1})	δC_pV^{-1} (J·cm^{-3}·K^{-1})	T (K)	C_pV^{-1} (J·cm^{-3}·K^{-1})	δC_pV^{-1} (J·cm^{-3}·K^{-1})
329.371	2.114	0.015	308.727	2.070	0.016	294.407	2.063	0.021
328.740	2.112	0.015	308.101	2.068	0.016	294.141	2.054	0.021
328.114	2.109	0.015	307.476	2.066	0.016	293.876	2.056	0.021
327.488	2.108	0.015	306.851	2.065	0.017	293.611	2.068	0.021
326.863	2.107	0.015	306.225	2.064	0.017	293.345	2.060	0.021
326.237	2.106	0.015	305.601	2.063	0.017	293.080	2.061	0.021
325.612	2.104	0.015	304.974	2.062	0.017	292.815	2.075	0.022
324.986	2.102	0.015	304.349	2.060	0.017	292.550	2.074	0.022
324.361	2.101	0.015	303.724	2.060	0.017	292.284	2.075	0.022
323.736	2.100	0.015	303.099	2.059	0.017	292.019	2.075	0.022
323.110	2.098	0.015	302.474	2.057	0.017	291.754	2.103	0.023
322.485	2.097	0.015	301.848	2.058	0.017	291.488	2.141	0.024
321.860	2.096	0.015	301.223	2.056	0.017	291.223	2.281	0.028
321.234	2.095	0.015	300.598	2.055	0.017	290.957	2.217	0.026
320.609	2.093	0.015	299.972	2.054	0.017	290.692	2.234	0.027
319.983	2.092	0.015	299.173	2.069	0.017	290.427	2.203	0.026
319.358	2.091	0.015	298.918	2.063	0.020	290.161	2.196	0.026
318.733	2.089	0.015	298.653	2.051	0.020	289.896	2.180	0.025
318.107	2.088	0.015	298.388	2.053	0.020	289.630	2.166	0.025
317.482	2.087	0.015	298.122	2.046	0.020	289.365	2.158	0.025
316.857	2.085	0.016	297.857	2.057	0.020	289.100	2.163	0.025
316.231	2.084	0.016	297.592	2.062	0.020	288.835	2.144	0.024
315.606	2.083	0.016	297.326	2.053	0.020	288.569	2.161	0.025
314.981	2.082	0.016	297.060	2.052	0.020	288.304	2.129	0.024
314.355	2.080	0.016	296.795	2.057	0.020	288.039	2.140	0.025
313.730	2.079	0.016	296.530	2.055	0.020	287.773	2.116	0.024
313.105	2.076	0.016	296.265	2.053	0.020	287.508	2.129	0.024
312.479	2.077	0.016	295.999	2.040	0.020	287.243	2.118	0.024
311.854	2.075	0.016	295.734	2.055	0.020	286.977	2.102	0.023
311.228	2.075	0.016	295.469	2.046	0.020	286.711	2.104	0.024
310.603	2.073	0.016	295.203	2.053	0.020	286.446	2.103	0.024
309.977	2.071	0.016	294.937	2.050	0.020	286.181	2.100	0.024
309.352	2.070	0.016	294.672	2.055	0.021			

Table 3 A part of data of the isobaric heat capacity per unit volume at the critical composition and their uncertainties $\delta C_p V^{-1}$ at different temperatures for {(1-x_c) 2-pentanol + x_c [C_8mim][BF_4]} (T_c=295.101 K)

T (K)	C_pV^{-1} (J·cm^{-3}·K^{-1})	δC_pV^{-1} (J·cm^{-3}·K^{-1})	T (K)	C_pV^{-1} (J·cm^{-3}·K^{-1})	δC_pV^{-1} (J·cm^{-3}·K^{-1})	T (K)	C_pV^{-1} (J·cm^{-3}·K^{-1})	δC_pV^{-1} (J·cm^{-3}·K^{-1})
333.808	2.252	0.018	313.164	2.224	0.020	298.917	2.210	0.024
333.179	2.257	0.018	312.540	2.222	0.020	298.653	2.204	0.024
332.552	2.258	0.018	311.914	2.220	0.020	298.387	2.205	0.024
331.927	2.260	0.018	311.290	2.215	0.020	298.121	2.205	0.024
331.301	2.259	0.018	310.664	2.217	0.020	297.856	2.207	0.024
330.675	2.258	0.018	310.038	2.217	0.020	297.591	2.212	0.025
330.050	2.255	0.018	309.414	2.214	0.020	297.325	2.214	0.025
329.425	2.255	0.018	308.787	2.213	0.020	297.060	2.209	0.025
328.799	2.251	0.018	308.163	2.213	0.021	296.794	2.210	0.025
328.173	2.251	0.018	307.537	2.211	0.021	296.530	2.215	0.025
327.549	2.252	0.018	306.912	2.211	0.021	296.264	2.223	0.025
326.923	2.249	0.018	306.286	2.208	0.021	295.998	2.225	0.025
326.298	2.250	0.018	305.661	2.209	0.021	295.734	2.233	0.026
325.673	2.249	0.018	305.036	2.205	0.021	295.468	2.242	0.026
325.047	2.249	0.019	304.410	2.206	0.021	295.202	2.265	0.026
324.422	2.245	0.019	303.692	2.219	0.024	294.937	2.465	0.033
323.796	2.244	0.019	303.429	2.212	0.023	294.672	2.410	0.031
323.172	2.242	0.019	303.163	2.212	0.023	294.407	2.410	0.031
322.546	2.239	0.019	302.898	2.206	0.023	294.141	2.370	0.030
321.920	2.241	0.019	302.633	2.201	0.023	293.876	2.358	0.030
321.295	2.239	0.019	302.368	2.206	0.023	293.610	2.355	0.030
320.669	2.238	0.019	302.102	2.204	0.023	293.345	2.326	0.029
320.045	2.238	0.019	301.837	2.202	0.023	293.079	2.346	0.030
319.419	2.235	0.019	301.571	2.198	0.023	292.814	2.299	0.028
318.794	2.235	0.019	301.306	2.209	0.024	292.548	2.345	0.030
318.168	2.232	0.019	301.041	2.204	0.024	292.284	2.279	0.028
317.542	2.234	0.019	300.775	2.204	0.024	292.018	2.313	0.029
316.918	2.232	0.019	300.510	2.203	0.024	291.753	2.282	0.028
316.292	2.229	0.019	300.244	2.203	0.024	291.487	2.295	0.029

315.667	2.229	0.020	299.979	2.204	0.024	291.222	2.271	0.028
315.041	2.226	0.020	299.714	2.212	0.024	290.957	2.289	0.029
314.416	2.227	0.020	299.448	2.205	0.024	290.691	2.252	0.028
313.791	2.224	0.020	299.183	2.203	0.024			

Table 4 A part of data of the isobaric heat capacity per unit volume at the critical composition and their uncertainties $\delta C_p V^{-1}$ at different temperatures for {(1-x_c) 1-hexanol + x_c [C_8mim][BF_4]} (T_c=300.155 K)

T (K)	C_pV^{-1} (J·cm^{-3}·K^{-1})	δC_pV^{-1} (J·cm^{-3}·K^{-1})	T (K)	C_pV^{-1} (J·cm^{-3}·K^{-1})	δC_pV^{-1} (J·cm^{-3}·K^{-1})	T (K)	C_pV^{-1} (J·cm^{-3}·K^{-1})	δC_pV^{-1} (J·cm^{-3}·K^{-1})
338.877	2.131	0.014	318.236	2.091	0.016	303.988	2.074	0.020
338.248	2.125	0.014	317.610	2.090	0.016	303.722	2.072	0.020
337.623	2.125	0.014	316.985	2.088	0.016	303.458	2.068	0.020
336.997	2.122	0.014	316.359	2.088	0.016	303.192	2.072	0.020
336.371	2.123	0.014	315.734	2.088	0.016	302.927	2.073	0.020
335.746	2.120	0.014	315.109	2.085	0.016	302.661	2.078	0.020
335.120	2.120	0.014	314.483	2.086	0.016	302.396	2.081	0.020
334.496	2.120	0.014	313.858	2.082	0.016	302.130	2.080	0.020
333.870	2.117	0.014	313.233	2.084	0.016	301.866	2.076	0.020
333.245	2.119	0.014	312.608	2.083	0.016	301.601	2.089	0.021
332.619	2.116	0.014	311.982	2.080	0.016	301.334	2.085	0.020
331.994	2.116	0.014	311.356	2.081	0.016	301.070	2.091	0.021
331.368	2.115	0.015	310.731	2.077	0.016	300.804	2.092	0.021
330.742	2.112	0.014	310.106	2.079	0.016	300.538	2.101	0.021
330.118	2.112	0.015	309.481	2.077	0.016	300.273	2.119	0.022
329.492	2.111	0.015	308.763	2.093	0.020	300.007	2.336	0.028
328.867	2.110	0.015	308.499	2.061	0.019	299.743	2.247	0.025
328.241	2.108	0.015	308.234	2.072	0.019	299.477	2.259	0.026
327.616	2.107	0.015	307.968	2.076	0.019	299.212	2.224	0.025
326.991	2.107	0.015	307.703	2.077	0.019	298.946	2.208	0.024
326.365	2.106	0.015	307.437	2.073	0.019	298.681	2.197	0.024
325.740	2.105	0.015	307.172	2.078	0.019	298.416	2.191	0.024
325.115	2.103	0.015	306.907	2.077	0.019	298.151	2.174	0.023
324.489	2.102	0.015	306.641	2.086	0.020	297.886	2.187	0.024

323.864	2.101	0.015	306.376	2.069	0.019	297.620	2.142	0.023
323.238	2.100	0.015	306.111	2.074	0.019	297.355	2.181	0.024
322.614	2.100	0.015	305.845	2.072	0.019	297.090	2.137	0.023
321.988	2.098	0.015	305.581	2.086	0.020	296.823	2.171	0.024
321.362	2.096	0.015	305.315	2.069	0.019	296.558	2.122	0.022
320.738	2.096	0.015	305.049	2.083	0.020	296.293	2.152	0.023
320.111	2.094	0.015	304.785	2.072	0.020	296.028	2.120	0.022
319.487	2.093	0.015	304.519	2.071	0.020	295.762	2.130	0.023
318.861	2.092	0.015	304.254	2.075	0.020			

Table 5 A part of data of the isobaric heat capacity per unit volume at the critical composition and their uncertainties $\delta C_p V^{-1}$ at different temperatures for {(1-x_c) 1-heptanol + x_c [C_8mim][BF_4]} (T_c=307.523 K)

T (K)	C_pV^{-1} (J·cm^{-3}·K^{-1})	δC_pV^{-1} (J·cm^{-3}·K^{-1})	T (K)	C_pV^{-1} (J·cm^{-3}·K^{-1})	δC_pV^{-1} (J·cm^{-3}·K^{-1})	T (K)	C_pV^{-1} (J·cm^{-3}·K^{-1})	δC_pV^{-1} (J·cm^{-3}·K^{-1})
346.255	2.121	0.013	315.818	2.079	0.018	315.876	2.101	0.019
345.314	2.119	0.013	315.420	2.090	0.019	315.478	2.091	0.019
344.376	2.122	0.013	315.021	2.090	0.019	315.081	2.089	0.019
343.438	2.124	0.013	314.624	2.071	0.018	314.683	2.089	0.019
342.500	2.127	0.014	314.226	2.077	0.018	314.284	2.092	0.019
341.562	2.124	0.014	313.827	2.091	0.019	313.886	2.093	0.019
340.625	2.128	0.014	313.430	2.098	0.019	313.488	2.092	0.019
339.686	2.127	0.014	313.032	2.095	0.019	313.089	2.087	0.019
338.748	2.127	0.014	312.634	2.084	0.019	312.692	2.095	0.019
337.809	2.126	0.014	312.236	2.080	0.019	312.295	2.090	0.019
336.872	2.124	0.014	311.837	2.104	0.019	311.896	2.091	0.019
335.933	2.122	0.014	311.440	2.102	0.019	311.497	2.090	0.019
334.996	2.123	0.014	311.041	2.094	0.019	311.099	2.091	0.019
334.057	2.119	0.014	310.643	2.096	0.019	310.702	2.094	0.019
333.119	2.118	0.014	310.245	2.084	0.019	310.304	2.093	0.019
332.181	2.117	0.014	309.847	2.099	0.019	309.906	2.094	0.019
331.243	2.117	0.015	309.449	2.098	0.020	309.507	2.099	0.020
330.305	2.114	0.015	309.051	2.093	0.019	309.110	2.102	0.019
329.368	2.108	0.015	308.654	2.119	0.020	308.712	2.107	0.020

328.429	2.115	0.015	308.255	2.099	0.020	308.314	2.107	0.020
327.491	2.111	0.015	307.857	2.130	0.020	307.916	2.117	0.020
326.553	2.107	0.015	307.460	2.357	0.025	307.517	2.268	0.024
325.615	2.105	0.015	307.061	2.259	0.024	307.119	2.237	0.023
324.677	2.105	0.015	306.663	2.211	0.023	306.721	2.244	0.024
323.739	2.104	0.015	306.265	2.211	0.023	306.324	2.225	0.023
322.800	2.102	0.015	305.867	2.220	0.023	305.925	2.210	0.023
321.863	2.100	0.015	305.469	2.209	0.023	305.527	2.190	0.022
320.924	2.101	0.015	305.071	2.188	0.022	305.129	2.183	0.022
319.987	2.100	0.015	304.673	2.162	0.022	304.731	2.188	0.022
319.049	2.097	0.016	304.275	2.192	0.023	304.333	2.173	0.022
318.110	2.096	0.016	303.876	2.142	0.021	303.935	2.152	0.022
317.172	2.095	0.016	303.479	2.127	0.021	303.537	2.139	0.021
316.216	2.128	0.019	316.272	2.096	0.019			

Table 6 A part of data of the isobaric heat capacity per unit volume at the critical composition and their uncertainties $\delta C_p V^{-1}$ at different temperatures for {(1-x_c) 1-propanol + x_c [C_8mim][PF_6]} (T_c=307.877 K)

T (K)	C_pV^{-1} ($J\cdot cm^{-3}\cdot K^{-1}$)	δC_pV^{-1} ($J\cdot cm^{-3}\cdot K^{-1}$)	T (K)	C_pV^{-1} ($J\cdot cm^{-3}\cdot K^{-1}$)	δC_pV^{-1} ($J\cdot cm^{-3}\cdot K^{-1}$)	T (K)	C_pV^{-1} ($J\cdot cm^{-3}\cdot K^{-1}$)	δC_pV^{-1} ($J\cdot cm^{-3}\cdot K^{-1}$)
347.245	2.226	0.017	326.599	2.179	0.017	312.207	2.173	0.021
346.612	2.217	0.015	325.973	2.178	0.017	311.942	2.178	0.021
345.985	2.214	0.015	325.348	2.177	0.017	311.677	2.174	0.021
345.360	2.212	0.015	324.722	2.177	0.017	311.411	2.183	0.021
344.735	2.210	0.015	324.098	2.177	0.017	311.146	2.178	0.021
344.109	2.207	0.015	323.472	2.176	0.017	310.880	2.186	0.021
343.484	2.205	0.015	322.846	2.173	0.017	310.615	2.183	0.021
342.858	2.203	0.015	322.221	2.174	0.017	310.350	2.198	0.022
342.232	2.203	0.015	321.596	2.172	0.017	310.084	2.190	0.022
341.608	2.200	0.015	320.970	2.173	0.017	309.819	2.190	0.022
340.982	2.199	0.015	320.345	2.172	0.017	309.554	2.185	0.022
340.357	2.198	0.015	319.720	2.172	0.017	309.288	2.198	0.022
339.731	2.198	0.015	319.095	2.172	0.017	309.023	2.195	0.022
339.106	2.196	0.015	318.469	2.171	0.018	308.757	2.215	0.023

338.480	2.194	0.015	317.844	2.170	0.018	308.492	2.221	0.023
337.855	2.194	0.016	317.218	2.170	0.018	308.226	2.227	0.023
337.230	2.191	0.016	316.718	2.305	0.023	307.961	2.271	0.024
336.605	2.191	0.016	316.453	2.169	0.020	307.696	2.453	0.029
335.979	2.190	0.016	316.187	2.179	0.021	307.431	2.429	0.028
335.354	2.190	0.016	315.922	2.182	0.021	307.165	2.388	0.027
334.728	2.188	0.016	315.657	2.168	0.020	306.900	2.365	0.027
334.103	2.187	0.016	315.392	2.176	0.021	306.635	2.366	0.027
333.477	2.186	0.016	315.126	2.173	0.020	306.369	2.355	0.027
332.852	2.185	0.016	314.861	2.183	0.021	306.104	2.350	0.027
332.227	2.184	0.016	314.595	2.176	0.021	305.839	2.336	0.026
331.601	2.184	0.016	314.330	2.167	0.020	305.573	2.321	0.026
330.977	2.184	0.016	314.065	2.177	0.021	305.308	2.312	0.026
330.350	2.184	0.016	313.799	2.181	0.021	305.043	2.305	0.026
329.725	2.183	0.016	313.534	2.176	0.021	304.777	2.304	0.026
329.100	2.181	0.016	313.268	2.175	0.021	304.512	2.293	0.025
328.475	2.180	0.016	313.003	2.175	0.021	304.246	2.280	0.025
327.849	2.181	0.016	312.737	2.180	0.021	303.981	2.280	0.025
327.224	2.180	0.017	312.473	2.163	0.020			

Table 7 A part of data of the specific heat capacity and the isobaric heat capacity per unit volume at the critical composition and their uncertainties $\delta c_{p,s}$ and $\delta C_p V^{-1}$ at different temperatures for {(1-x_c) 1-butanol+ x_c [C_8mim][PF_6]} (T_c=326.524 K)

T (K)	$c_{p,s}$ (J·g^{-1}·K^{-1})	$\delta c_{p,s}$ (J·g^{-1}·K^{-1})	C_pV^{-1} (J·cm^{-3}·K^{-1})	δC_pV^{-1} (J·cm^{-3}·K^{-1})
348.148	2.590	0.017	2.246	0.016
347.817	2.595	0.016	2.252	0.016
347.490	2.595	0.016	2.252	0.016
347.165	2.591	0.017	2.250	0.016
346.841	2.593	0.016	2.252	0.016
346.514	2.592	0.016	2.252	0.016
346.189	2.590	0.016	2.251	0.016
345.866	2.590	0.016	2.252	0.016
345.539	2.589	0.016	2.251	0.016
345.213	2.588	0.016	2.251	0.016
344.890	2.586	0.016	2.250	0.016
344.564	2.585	0.016	2.250	0.016
344.237	2.584	0.016	2.250	0.016

343.910	2.581	0.016	2.248	0.016
343.588	2.578	0.016	2.246	0.016
343.261	2.579	0.016	2.248	0.016
342.935	2.577	0.016	2.247	0.016
342.612	2.575	0.016	2.246	0.016
342.284	2.573	0.016	2.245	0.016
341.960	2.577	0.016	2.249	0.016
341.632	2.577	0.016	2.250	0.016
341.308	2.574	0.016	2.248	0.016
341.008	2.572	0.016	2.247	0.016
340.659	2.571	0.016	2.247	0.016
340.334	2.572	0.016	2.248	0.016
340.007	2.564	0.016	2.242	0.016
339.682	2.565	0.016	2.244	0.016
339.358	2.561	0.017	2.241	0.016
339.031	2.563	0.016	2.243	0.016
338.706	2.565	0.016	2.246	0.016
338.379	2.563	0.016	2.244	0.016
338.057	2.560	0.016	2.243	0.016
337.732	2.561	0.016	2.245	0.016
337.403	2.560	0.016	2.245	0.016
337.079	2.555	0.016	2.241	0.016
336.758	2.546	0.017	2.234	0.016
336.427	2.549	0.017	2.237	0.016
336.101	2.549	0.017	2.238	0.016
335.778	2.547	0.017	2.237	0.016
335.453	2.549	0.017	2.239	0.016
335.127	2.550	0.016	2.241	0.016
334.800	2.552	0.016	2.243	0.016
334.476	2.549	0.016	2.241	0.016
334.155	2.548	0.016	2.241	0.016
333.836	2.546	0.016	2.240	0.016
333.505	2.546	0.016	2.240	0.016
333.176	2.545	0.016	2.240	0.016
332.848	2.542	0.016	2.239	0.016
332.527	2.541	0.016	2.239	0.016
332.199	2.540	0.016	2.239	0.016
331.873	2.541	0.016	2.240	0.016
331.548	2.540	0.016	2.239	0.016
331.222	2.543	0.016	2.243	0.016
330.898	2.542	0.016	2.243	0.016
330.572	2.542	0.016	2.244	0.016
330.253	2.542	0.016	2.244	0.016
329.924	2.542	0.016	2.244	0.016

329.595	2.542	0.016	2.246	0.016
329.277	2.542	0.016	2.247	0.016
328.946	2.545	0.016	2.249	0.016
328.619	2.546	0.016	2.251	0.016
328.293	2.551	0.016	2.257	0.016
327.970	2.561	0.016	2.266	0.015
327.646	2.556	0.016	2.262	0.015
327.319	2.561	0.016	2.267	0.015
326.994	2.576	0.016	2.281	0.015
326.670	2.600	0.015	2.303	0.015
326.343	2.875	0.013	2.548	0.013
326.019	2.793	0.014	2.475	0.014
325.694	2.747	0.014	2.436	0.014
325.366	2.734	0.014	2.425	0.014
325.042	2.720	0.014	2.413	0.014
324.716	2.683	0.014	2.381	0.014
324.391	2.682	0.014	2.381	0.014
324.065	2.681	0.014	2.381	0.014
323.740	2.660	0.015	2.363	0.014
323.415	2.649	0.015	2.354	0.014
323.088	2.637	0.015	2.344	0.015
322.772	2.626	0.015	2.335	0.015
322.438	2.618	0.015	2.328	0.015
322.116	2.607	0.015	2.319	0.015
321.791	2.597	0.015	2.311	0.015
321.462	2.590	0.015	2.306	0.015
321.136	2.580	0.015	2.297	0.015
320.816	2.573	0.015	2.292	0.015
320.487	2.566	0.016	2.286	0.015
320.160	2.560	0.016	2.282	0.015
319.835	2.553	0.016	2.276	0.015
319.512	2.548	0.016	2.273	0.015
319.186	2.541	0.016	2.267	0.015
318.862	2.535	0.016	2.262	0.015
318.539	2.529	0.016	2.258	0.016
318.207	2.523	0.016	2.253	0.016
317.883	2.518	0.016	2.249	0.016
317.558	2.513	0.016	2.245	0.016
317.233	2.507	0.016	2.240	0.016
316.904	2.502	0.016	2.237	0.016
316.583	2.498	0.016	2.234	0.016
316.257	2.493	0.016	2.230	0.016
315.930	2.487	0.017	2.225	0.016
315.610	2.480	0.017	2.220	0.016

315.283	2.477	0.017	2.218	0.016
314.957	2.474	0.017	2.216	0.016
314.630	2.465	0.017	2.208	0.016
314.304	2.459	0.017	2.203	0.016

Table 8 A part of data of the specific heat capacity and the isobaric heat capacity per unit volume at the critical composition and their uncertainties $\delta c_{p,s}$ and $\delta C_p V^{-1}$ at different temperatures for {(1-x_c) 2-butanol+ x_c [C_8mim][PF_6]} (T_c=325.059 K)

T (K)	$c_{p,s}$ ($J\cdot g^{-1}\cdot K^{-1}$)	$\delta c_{p,s}$ ($J\cdot g^{-1}\cdot K^{-1}$)	C_pV^{-1} ($J\cdot cm^{-3}\cdot K^{-1}$)	δC_pV^{-1} ($J\cdot cm^{-3}\cdot K^{-1}$)
348.151	2.803	0.011	2.256	0.011
347.826	2.806	0.011	2.259	0.011
347.501	2.806	0.011	2.259	0.011
347.175	2.806	0.011	2.260	0.011
346.850	2.805	0.011	2.260	0.011
346.528	2.803	0.011	2.259	0.011
346.200	2.802	0.011	2.259	0.011
345.874	2.802	0.011	2.260	0.011
345.549	2.801	0.011	2.260	0.011
345.224	2.798	0.011	2.258	0.011
344.898	2.797	0.011	2.257	0.011
344.574	2.797	0.011	2.258	0.011
344.247	2.795	0.011	2.258	0.011
343.928	2.794	0.011	2.257	0.011
343.596	2.793	0.011	2.257	0.011
343.270	2.794	0.011	2.258	0.011
342.943	2.792	0.011	2.258	0.011
342.621	2.792	0.011	2.259	0.011
342.296	2.790	0.011	2.257	0.011
341.968	2.789	0.011	2.257	0.011
341.645	2.789	0.011	2.258	0.011
341.320	2.787	0.011	2.257	0.011
340.993	2.787	0.011	2.258	0.011
340.671	2.784	0.011	2.256	0.011
340.344	2.783	0.011	2.256	0.011
340.017	2.782	0.011	2.256	0.011
339.692	2.781	0.011	2.256	0.011
339.365	2.782	0.011	2.257	0.011
339.042	2.778	0.011	2.255	0.011
338.718	2.777	0.011	2.254	0.010
338.393	2.776	0.011	2.254	0.011
338.064	2.775	0.011	2.255	0.011

337.740	2.774	0.011	2.255	0.011
337.417	2.773	0.011	2.254	0.010
337.091	2.775	0.011	2.256	0.011
336.764	2.782	0.011	2.263	0.011
336.439	2.778	0.011	2.260	0.011
336.114	2.776	0.011	2.259	0.011
335.787	2.775	0.011	2.259	0.011
335.462	2.774	0.011	2.259	0.011
335.137	2.769	0.011	2.256	0.011
334.813	2.766	0.011	2.254	0.010
334.487	2.768	0.011	2.256	0.011
334.161	2.767	0.011	2.257	0.011
333.835	2.767	0.011	2.257	0.011
333.511	2.766	0.011	2.257	0.011
333.184	2.765	0.011	2.257	0.011
332.859	2.765	0.011	2.257	0.011
332.533	2.764	0.011	2.257	0.011
332.208	2.764	0.011	2.258	0.010
331.884	2.763	0.011	2.258	0.010
331.560	2.763	0.011	2.258	0.010
331.238	2.764	0.011	2.260	0.010
330.908	2.763	0.011	2.260	0.010
330.582	2.762	0.011	2.260	0.010
330.257	2.762	0.011	2.260	0.010
329.932	2.762	0.011	2.261	0.010
329.607	2.762	0.011	2.262	0.010
329.279	2.762	0.011	2.262	0.010
328.954	2.763	0.011	2.264	0.010
328.630	2.763	0.011	2.265	0.010
328.305	2.765	0.011	2.267	0.010
327.980	2.766	0.011	2.268	0.010
327.653	2.766	0.011	2.269	0.010
327.328	2.768	0.010	2.272	0.010
327.005	2.771	0.010	2.275	0.010
326.674	2.775	0.010	2.278	0.010
326.352	2.779	0.010	2.283	0.010
326.030	2.785	0.010	2.288	0.010
325.703	2.792	0.010	2.294	0.010
325.376	2.811	0.010	2.310	0.010
325.051	2.925	0.010	2.406	0.010
324.725	3.088	0.010	2.540	0.010
324.400	2.995	0.010	2.464	0.010
324.075	2.954	0.010	2.432	0.010
323.751	2.942	0.010	2.422	0.010

323.425	2.924	0.010	2.408	0.010
323.099	2.916	0.010	2.402	0.010
322.776	2.903	0.010	2.392	0.010
322.450	2.891	0.010	2.383	0.010
322.122	2.882	0.010	2.376	0.010
321.797	2.875	0.010	2.371	0.010
321.473	2.862	0.010	2.362	0.010
321.146	2.854	0.010	2.355	0.010
320.822	2.846	0.010	2.350	0.010
320.496	2.838	0.010	2.344	0.010
320.169	2.831	0.010	2.339	0.010
319.849	2.823	0.010	2.333	0.010
319.521	2.817	0.010	2.328	0.010
319.198	2.809	0.010	2.322	0.010
318.871	2.803	0.010	2.318	0.010
318.548	2.797	0.010	2.314	0.010
318.220	2.791	0.010	2.309	0.010
317.894	2.784	0.010	2.305	0.010
317.568	2.779	0.010	2.301	0.010
317.243	2.775	0.010	2.298	0.010
316.917	2.770	0.010	2.295	0.010
316.592	2.764	0.010	2.291	0.010
316.267	2.758	0.010	2.287	0.010
315.941	2.754	0.010	2.284	0.010
315.616	2.750	0.010	2.281	0.010
315.291	2.744	0.010	2.277	0.010
314.965	2.737	0.010	2.271	0.010
314.640	2.731	0.010	2.267	0.010
314.315	2.729	0.010	2.266	0.010

Table 9 A part of data of the specific heat capacity and the isobaric heat capacity per unit volume at the critical composition and their uncertainties $\delta c_{p,s}$ and $\delta C_p V^{-1}$ at different temperatures for {(1-x_c) tert-butanol+ x_c [C_8mim][PF_6]} (T_c=320.800 K)

T (K)	$c_{p,s}$ ($J\cdot g^{-1}\cdot K^{-1}$)	$\delta c_{p,s}$ ($J\cdot g^{-1}\cdot K^{-1}$)	C_pV^{-1} ($J\cdot cm^{-3}\cdot K^{-1}$)	δC_pV^{-1} ($J\cdot cm^{-3}\cdot K^{-1}$)
348.153	2.968	0.012	2.397	0.012
347.827	2.967	0.012	2.398	0.011
347.500	2.963	0.012	2.396	0.011
347.176	2.963	0.012	2.397	0.012
346.850	2.965	0.012	2.400	0.012
346.526	2.960	0.012	2.397	0.011
346.201	2.958	0.012	2.396	0.011

345.873	2.958	0.012	2.397	0.011
345.549	2.954	0.012	2.395	0.011
345.222	2.952	0.012	2.394	0.011
344.897	2.952	0.012	2.395	0.011
344.575	2.952	0.012	2.397	0.011
344.248	2.952	0.012	2.398	0.011
343.921	2.952	0.012	2.398	0.011
343.596	2.950	0.012	2.398	0.011
343.272	2.949	0.012	2.398	0.011
342.946	2.946	0.012	2.397	0.011
342.620	2.944	0.012	2.396	0.011
342.295	2.941	0.012	2.394	0.012
341.970	2.940	0.012	2.395	0.011
341.645	2.942	0.012	2.398	0.011
341.318	2.941	0.012	2.398	0.011
340.996	2.940	0.012	2.398	0.011
340.669	2.938	0.012	2.398	0.011
340.342	2.935	0.012	2.396	0.011
340.018	2.933	0.012	2.395	0.011
339.695	2.930	0.012	2.395	0.011
339.370	2.930	0.012	2.395	0.012
339.042	2.928	0.012	2.395	0.011
338.715	2.925	0.012	2.393	0.011
338.391	2.925	0.012	2.394	0.011
338.065	2.925	0.012	2.395	0.011
337.740	2.923	0.012	2.395	0.011
337.414	2.921	0.012	2.394	0.011
337.088	2.920	0.012	2.395	0.011
336.766	2.925	0.012	2.400	0.012
336.437	2.919	0.012	2.396	0.012
336.110	2.917	0.012	2.395	0.012
335.788	2.916	0.012	2.395	0.012
335.460	2.915	0.012	2.395	0.012
335.143	2.911	0.012	2.393	0.011
334.811	2.908	0.012	2.392	0.011
334.489	2.906	0.012	2.391	0.011
334.161	2.906	0.012	2.392	0.011
333.837	2.905	0.012	2.392	0.011
333.509	2.903	0.012	2.392	0.011
333.184	2.901	0.012	2.391	0.011
332.865	2.900	0.012	2.392	0.011
332.534	2.899	0.012	2.391	0.011
332.213	2.896	0.012	2.390	0.011
331.886	2.895	0.012	2.391	0.011

331.558	2.894	0.012	2.391	0.011
331.227	2.893	0.012	2.391	0.011
330.911	2.892	0.012	2.391	0.011
330.576	2.890	0.012	2.391	0.011
330.255	2.888	0.012	2.390	0.011
329.931	2.888	0.012	2.391	0.011
329.604	2.885	0.012	2.389	0.011
329.277	2.884	0.012	2.390	0.011
328.958	2.883	0.012	2.390	0.011
328.631	2.882	0.012	2.390	0.011
328.308	2.879	0.012	2.389	0.011
327.973	2.878	0.012	2.389	0.011
327.655	2.877	0.012	2.389	0.011
327.321	2.876	0.012	2.389	0.011
327.008	2.874	0.012	2.388	0.011
326.678	2.876	0.012	2.391	0.011
326.349	2.878	0.012	2.394	0.011
326.022	2.872	0.012	2.390	0.011
325.739	2.873	0.012	2.392	0.011
325.383	2.871	0.012	2.391	0.011
325.051	2.865	0.012	2.387	0.011
324.730	2.869	0.012	2.392	0.011
324.399	2.867	0.012	2.391	0.011
324.074	2.867	0.012	2.392	0.011
323.749	2.864	0.012	2.391	0.011
323.427	2.869	0.012	2.396	0.011
323.100	2.864	0.012	2.393	0.011
322.772	2.868	0.012	2.397	0.011
322.447	2.866	0.012	2.396	0.011
322.125	2.872	0.012	2.403	0.011
321.798	2.868	0.012	2.400	0.011
321.471	2.875	0.012	2.407	0.011
321.153	2.878	0.012	2.410	0.011
320.821	2.938	0.011	2.462	0.011
320.495	2.971	0.011	2.491	0.011
320.173	2.965	0.011	2.486	0.011
319.845	2.946	0.011	2.471	0.011
319.518	2.937	0.011	2.465	0.011
319.194	2.945	0.011	2.473	0.011
318.868	2.930	0.011	2.461	0.011
318.543	2.924	0.011	2.457	0.011
318.218	2.919	0.011	2.454	0.011
317.895	2.915	0.011	2.451	0.011
317.568	2.912	0.011	2.450	0.011

317.244	2.902	0.011	2.443	0.011
316.918	2.898	0.011	2.441	0.011
316.590	2.899	0.011	2.443	0.011
316.265	2.897	0.011	2.442	0.011
315.944	2.879	0.011	2.428	0.011
315.617	2.885	0.011	2.434	0.011
315.290	2.887	0.011	2.436	0.011
314.964	2.884	0.011	2.435	0.011
314.639	2.875	0.011	2.429	0.011
314.314	2.871	0.011	2.426	0.011