

Volumetric and Ultrasonic Studies of 1-Ethyl-3-methylimidazolium Trifluoromethanesulfonate Ionic Liquid with Methanol, Ethanol, 1-Propanol, and Water at Several Temperatures. Ernesto Vercher, A. Vicent Orchillés, Pablo J. Miguel, and Antoni Martínez-Andreu,* *J. Chem. Eng. Data* 2007, 52, 1468–1482.

Page 1471. In Table 4, the densities, speeds of sound, and isentropic compressibilities of mixtures are in error. The correct values are given below.

Table 4. Density ρ , Excess Molar Volume V_m^E , Speed of Sound u , Excess Speed of Sound u^E , Isentropic Compressibility κ_S , and Excess Isentropic Compressibility κ_S^E for the Binary System [emim][triflate] (1) + Ethanol (2) at $T = (278.15 \text{ to } 328.15) \text{ K}$

x_1	ρ kg·m ⁻³	V_m^E cm ³ ·mol ⁻¹	u m·s ⁻¹	u^E m·s ⁻¹	κ_S TPa ⁻¹	κ_S^E TPa ⁻¹	x_1	ρ kg·m ⁻³	V_m^E cm ³ ·mol ⁻¹	u m·s ⁻¹	u^E m·s ⁻¹	κ_S TPa ⁻¹	κ_S^E TPa ⁻¹
$T = 278.15 \text{ K}$													
0.0499	892.80	-0.263	1232.96	29.57	736.79	-39.86	0.5932	1299.43	-0.367	1416.18	63.43	383.72	-37.99
0.1000	965.56	-0.378	1252.69	47.60	659.99	-57.02	0.6928	1331.10	-0.300	1435.87	49.87	364.38	-27.50
0.1503	1025.77	-0.439	1273.50	60.44	601.11	-65.20	0.8020	1359.80	-0.201	1454.20	32.80	347.76	-16.69
0.1999	1075.78	-0.474	1294.55	69.91	554.68	-68.69	0.8517	1371.25	-0.158	1461.89	24.82	341.24	-12.22
0.3009	1156.45	-0.502	1333.90	79.65	485.99	-66.57	0.9017	1382.03	-0.127	1468.98	16.39	335.31	-7.86
0.4001	1216.18	-0.463	1366.81	79.84	440.13	-58.42	0.9492	1391.38	-0.077	1475.88	8.83	329.95	-4.13
0.5015	1264.18	-0.416	1394.83	73.29	406.58	-47.90							
$T = 288.15 \text{ K}$													
0.0499	884.25	-0.288	1201.13	31.78	783.87	-46.89	0.5932	1290.81	-0.400	1392.43	68.83	399.57	-43.95
0.1000	956.95	-0.415	1223.08	51.46	698.56	-67.19	0.6928	1322.51	-0.325	1412.31	54.31	379.09	-31.84
0.1503	1017.12	-0.482	1245.56	65.53	633.72	-76.76	0.8020	1351.24	-0.216	1430.73	35.96	361.54	-19.39
0.1999	1067.12	-0.521	1267.89	75.89	582.94	-80.72	0.8517	1362.70	-0.169	1438.29	27.19	354.74	-14.17
0.3009	1147.78	-0.550	1308.55	86.17	508.82	-77.60	0.9017	1373.50	-0.135	1445.46	18.16	348.46	-9.20
0.4001	1207.52	-0.508	1342.17	86.24	459.72	-67.75	0.9492	1382.87	-0.081	1452.23	9.79	342.88	-4.83
0.5015	1255.54	-0.455	1370.61	79.17	423.98	-55.36							
$T = 298.15 \text{ K}$													
0.0499	875.66	-0.316	1170.11	34.80	834.09	-56.23	0.5932	1282.26	-0.439	1369.18	74.44	416.01	-50.72
0.1000	948.32	-0.456	1194.17	56.05	739.46	-79.84	0.6928	1313.99	-0.355	1389.28	58.84	394.30	-36.68
0.1503	1008.47	-0.531	1218.21	71.24	668.18	-90.74	0.8020	1342.74	-0.236	1407.84	39.06	375.75	-22.33
0.1999	1058.46	-0.573	1241.66	82.33	612.80	-94.93	0.8517	1354.22	-0.184	1415.44	29.56	368.58	-16.31
0.3009	1139.14	-0.606	1283.72	93.20	532.70	-90.54	0.9017	1365.03	-0.146	1422.67	19.80	361.95	-10.60
0.4001	1198.91	-0.560	1317.99	93.04	480.16	-78.55	0.9492	1374.41	-0.087	1429.37	10.58	356.12	-5.50
0.5015	1246.96	-0.501	1346.92	85.41	442.04	-63.94							
$T = 308.15 \text{ K}$													
0.0499	867.01	-0.348	1139.42	37.19	888.40	-66.01	0.5932	1273.76	-0.486	1346.39	80.22	433.08	-58.36
0.1000	939.65	-0.503	1165.70	60.24	783.18	-93.79	0.6928	1305.52	-0.392	1366.72	63.58	410.07	-42.18
0.1503	999.81	-0.587	1191.36	76.71	704.69	-106.37	0.8020	1334.31	-0.261	1385.42	42.35	390.46	-25.67
0.1999	1049.81	-0.634	1215.68	88.37	644.54	-110.62	0.8517	1345.80	-0.203	1393.07	32.12	382.89	-18.77
0.3009	1130.53	-0.669	1259.25	100.08	557.82	-104.99	0.9017	1356.63	-0.159	1400.42	21.66	375.86	-12.25
0.4001	1190.34	-0.621	1294.16	99.78	501.59	-90.61	0.9492	1366.02	-0.094	1407.04	11.55	369.77	-6.34
0.5015	1238.43	-0.555	1323.63	91.72	460.89	-73.57							
$T = 318.15 \text{ K}$													
0.0499	858.25	-0.384	1109.14	39.73	947.14	-77.60	0.5932	1265.32	-0.540	1323.94	86.31	450.88	-67.12
0.1000	930.92	-0.558	1137.53	64.53	830.16	-110.03	0.6928	1297.12	-0.436	1344.61	68.67	426.41	-48.51
0.1503	991.10	-0.652	1164.71	82.24	743.78	-124.41	0.8020	1325.93	-0.290	1363.47	45.90	405.68	-29.52
0.1999	1041.14	-0.704	1189.87	94.47	678.41	-128.66	0.8517	1337.44	-0.225	1371.13	34.84	397.71	-21.56
0.3009	1121.93	-0.743	1235.07	107.22	584.32	-121.66	0.9017	1348.27	-0.173	1378.68	23.68	390.21	-14.15
0.4001	1181.81	-0.691	1270.70	106.89	524.04	-104.55	0.9492	1357.67	-0.101	1385.20	12.58	383.87	-7.28
0.5015	1229.94	-0.619	1300.74	98.43	480.54	-84.69							
$T = 328.15 \text{ K}$													
0.0499	849.37	-0.428	1079.19	42.34	1010.90	-91.26	0.5932	1256.93	-0.605	1301.77	92.86	469.48	-77.28
0.1000	922.10	-0.622	1109.70	68.99	880.67	-129.14	0.6928	1288.75	-0.484	1323.04	74.44	443.29	-56.03
0.1503	982.34	-0.728	1138.38	87.98	785.53	-145.54	0.8020	1317.62	-0.325	1342.09	50.08	421.35	-34.19
0.1999	1032.44	-0.787	1164.35	100.82	714.45	-149.71	0.8517	1329.14	-0.252	1349.85	38.22	412.91	-25.05
0.3009	1113.33	-0.830	1211.21	114.74	612.26	-141.09	0.9017	1339.98	-0.191	1357.58	26.27	404.92	-16.59
0.4001	1173.30	-0.774	1247.65	114.54	547.53	-120.87	0.9492	1349.40	-0.112	1363.89	13.99	398.38	-8.55
0.5015	1221.51	-0.693	1278.31	105.78	500.99	-97.76							

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