

Supporting Information

Liquid phase behaviour of 1-butyl-3-methylimidazolium 2-(2-methoxyethoxy)-ethylsulfate with organic solvents and water.

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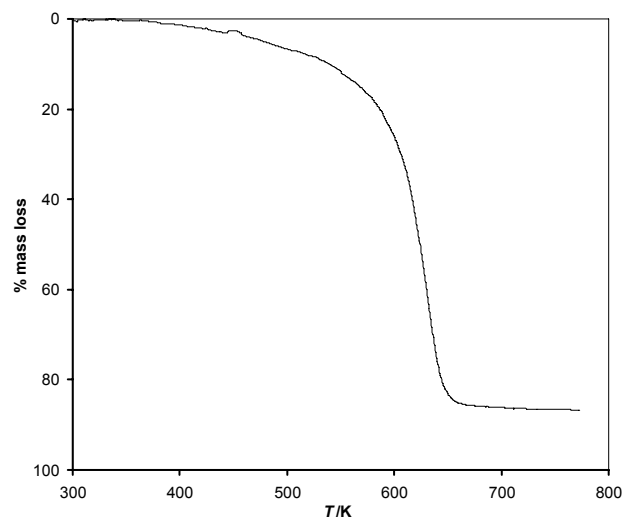


Figure S1 TG/DTA data of [BMIM][MDEGSO₄].

Table S1 Experimental liquid-liquid equilibrium data for $\{x_1 \text{ [BMIM][MDEGSO}_4\text{]} + (1-x_1) \text{ solvent}\}$: T_b , temperature of binodal curve; T_c , temperature of cloud point curve

x_1	T_b/K	T_c/K	x_1	T_b/K	T_c/K
<i>n</i> -Hexane					
0.9220	341.95		0.9486	323.55	
0.9279	338.85		0.9554	318.35	
0.9346	334.95		0.9631	310.25	
0.9413	330.25				
Cyclohexane					
0.8418	346.05	341.15	0.8808	318.75	312.85
0.8500	340.65	335.25	0.8918	312.65	306.45
0.8607	332.35	326.55	0.9054	303.75	297.45
0.8700	325.25	319.55			
Benzene					
0.3555	326.55	322.55	0.3786	314.15	310.45
0.3582	325.65	321.85	0.3829	310.65	306.85
0.3632	322.65	318.45	0.3874	307.15	303.35
0.3660	321.45	317.55	0.3923	300.35	296.25
0.3731	317.55	313.65	0.3969	293.25	288.85
0.3761	315.75	311.85			
<i>tert</i> -Amyl methyl ether					
0.8349	356.25	347.65	0.8729	328.65	319.35
0.8422	350.05	342.05	0.8811	320.75	311.55
0.8490	344.55	335.95	0.8910	313.35	304.15
0.8618	336.45	327.35	0.9093	298.95	288.55
Pentan-3-one					
0.3589	363.25	362.75	0.3934	328.55	327.62
0.3700	349.55	348.87	0.4063	320.35	318.65
0.3816	337.65	336.85	0.4144	314.20	312.55
0.3839	335.55	334.75	0.4278	302.27	299.65
Nonan-5-one					
0.8892	363.45	358.75	0.9161	323.25	318.55

x_1	T_b/K	T_c/K	x_1	T_b/K	T_c/K
0.8970	354.85	349.95	0.9179	319.35	314.35
0.9026	347.05	342.25	0.9219	310.80	305.95
0.9096	335.75	331.05	0.9271	298.95	294.35
0.9122	330.25	325.55			
Cyclopentanone					
0.0230	349.30	348.25	0.0381	307.90	306.95
0.0257	338.45	337.35	0.0396	305.25	304.30
0.0278	332.95	332.10	0.0410	302.25	301.20
0.0319	322.85	321.95	0.0417	300.60	299.84
0.0338	317.90	316.85	0.0426	298.45	297.50
0.0346	316.20	315.15	0.0435	296.25	295.20
0.0359	313.25	312.15	0.0453	293.05	291.95
0.0363	311.75	310.65			
Water					
0.0331	371.25		0.0760	348.65	
0.0379	369.05		0.0864	342.85	
0.0433	365.95		0.0951	335.85	
0.0500	362.45		0.1033	324.15	
0.0634	355.95		0.1081	303.45	