

Supporting Information

The Cation Symmetry effect on the Volatility of Ionic Liquids

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Vapor pressures measurements using Quartz crystal microbalance Knudsen effusion apparatus

Table S1 Experimental vapor pressures for the studied imidazolium based ILs, obtained by the quartz crystal microbalance Knudsen effusion apparatus.

<i>T</i> / K	<i>p</i> / Pa	Δp / Pa	<i>T</i> / K	<i>p</i> / Pa	Δp / Pa	<i>T</i> / K	<i>p</i> / Pa	Δp / Pa
<i>[C₂C₂im][Ntf₂]</i>								
455.54	0.0231	-0.0127	465.61	0.0426	0.0050	475.64	0.0776	-0.0016
457.58	0.0262	-0.0073	467.62	0.0479	0.0092	477.65	0.0877	-0.0078
459.57	0.0295	0.0000	469.58	0.0537	0.0132	479.68	0.0989	-0.0137
461.59	0.0333	0.0037	471.61	0.0610	0.0052			
463.59	0.0377	0.0035	473.60	0.0687	0.0031			
<i>[C₃C₃im][Ntf₂]</i>								
453.52	0.0285	-0.0065	467.60	0.0707	0.0056	481.63	0.1677	-0.0058
455.54	0.0327	-0.0071	469.61	0.0805	0.0030	483.65	0.1880	-0.0026
457.56	0.0373	-0.0056	471.60	0.0914	-0.0011	485.67	0.2095	0.0051
459.58	0.0428	-0.0088	473.59	0.1034	-0.0018	487.67	0.2355	0.0023
461.59	0.0476	0.0166	475.60	0.1177	-0.0098	489.68	0.2636	0.0023
463.62	0.0546	0.0119	477.61	0.1316	-0.0010			
465.58	0.0618	0.0124	479.62	0.1495	-0.0089			
<i>[C₄C₄im][Ntf₂]</i>								
455.52	0.0317	-0.0139	469.55	0.0784	0.0130	483.63	0.1902	-0.0063
457.53	0.0365	-0.0141	471.55	0.0891	0.0123	485.64	0.2155	-0.0127
459.52	0.0413	-0.0033	473.56	0.1006	0.0180	487.65	0.2436	-0.0180
461.53	0.0473	-0.0050	475.57	0.1147	0.0117			
463.54	0.0538	-0.0007	477.58	0.1305	0.0062			
465.53	0.0611	0.0035	479.61	0.1483	0.0014			
467.54	0.0690	0.0118	481.62	0.1684	-0.0040			
<i>[C₅C₅im][Ntf₂]</i>								
463.49	0.0375	-0.0014	475.54	0.0849	0.0048	487.55	0.1838	0.0006
465.54	0.0437	-0.0098	477.52	0.0972	-0.0003	489.55	0.2071	0.0045
467.56	0.0497	0.0026	479.52	0.1108	-0.0013	491.56	0.2353	-0.0004
469.57	0.0570	0.0020	481.53	0.1258	0.0011	493.58	0.2655	0.0002
471.54	0.0653	0.0004	483.55	0.1437	-0.0032	495.59	0.3006	-0.0037
473.55	0.0742	0.0076	485.56	0.1631	-0.0036			

$[C_6C_6im\ im][Ntf_2]$

463.53	0.0205	-0.0037	475.53	0.0476	0.0063	487.58	0.1063	0.0030
465.56	0.0236	0.0017	477.52	0.0549	-0.0024	489.59	0.1211	0.0006
467.58	0.0274	0.0014	479.54	0.0626	0.0040	491.60	0.1375	0.0013
469.59	0.0317	-0.0033	481.56	0.0715	0.0052	493.60	0.1566	-0.0038
471.61	0.0366	-0.0025	483.50	0.0810	0.0084	495.66	0.1795	-0.0128
473.54	0.0422	-0.0110	485.55	0.0928	0.0074			

$\Delta p = p - p_{\text{calc}}$, where p_{calc} is calculated from the Clarke and Glew equation (eq. 6) with the parameters given in Table1.

