ELECTRONIC SUPPLEMENTARY INFORMATION

(ESI)

Hybrid Green Nonaqueous Media: Tetraethylene Glycol Modifies Properties of (Choline Chloride + Urea) Deep Eutectic Solvent

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Table S1: E_T^N , π* , α , and β values calculated using absorbance probes Reichardt's Dye 33 (250 μM), nitroaniline (NA, 10 μM), and *N*, *N*-diethyl-4-nitroaniline (DENA, 25 μM) with equations (1), (2), (3), (4) and (5) for (Reline + TEG) Mixtures at different temperatures as a function of the mole fraction of TEG (x_{TEG}).

	E_T^N								
T(K)	x_{TEG}=0	x_{TEG}=0.05	x_{TEG}=0.10	x_{TEG}=0.15	x_{TEG}=0.2	x_{TEG}=0.4	x_{TEG}=0.6	x_{TEG}=0.8	x_{TEG}=1
298	0.83	0.82	0.79	0.77	0.77	0.74	0.72	0.70	0.64
313	0.82	0.81	0.77	0.76	0.75	0.72	0.71	0.69	0.62
328	0.80	0.78	0.77	0.75	0.74	0.71	0.68	0.67	0.59
343	0.78	0.78	0.74	0.74	0.72	0.69	0.67	0.66	0.57
358	0.78	0.76	0.74	0.72	0.71	0.67	0.66	0.64	0.54

	π *								
T(K)	x_{TEG}=0	x_{TEG}=0.05	x_{TEG}=0.10	x_{TEG}=0.15	x_{TEG}=0.2	x_{TEG}=0.4	x_{TEG}=0.6	x_{TEG}=0.8	x_{TEG}=1
298	1.23	1.24	1.21	1.19	1.15	1.08	1.03	0.99	0.90
313	1.23	1.23	1.21	1.19	1.15	1.08	0.99	0.97	0.86
328	1.23	1.23	1.23	1.17	1.15	1.05	0.99	0.93	0.84
343	1.23	1.23	1.21	1.17	1.14	1.05	0.97	0.92	0.82
358	1.23	1.23	1.21	1.17	1.14	1.03	0.95	0.90	0.78

	α								
T(K)	x_{TEG}=0	x_{TEG}=0.05	x_{TEG}=0.10	x_{TEG}=0.15	x_{TEG}=0.2	x_{TEG}=0.4	x_{TEG}=0.6	x_{TEG}=0.8	x_{TEG}=1
298	0.56	0.53	0.50	0.48	0.51	0.51	0.53	0.53	0.49
313	0.55	0.52	0.47	0.47	0.47	0.49	0.54	0.52	0.48
328	0.52	0.48	0.44	0.46	0.45	0.49	0.49	0.52	0.44
343	0.48	0.46	0.41	0.43	0.44	0.45	0.47	0.52	0.42
358	0.46	0.44	0.40	0.40	0.41	0.44	0.47	0.49	0.39

	β								
T(K)	x_{TEG}=0	x_{TEG}=0.05	x_{TEG}=0.10	x_{TEG}=0.15	x_{TEG}=0.2	x_{TEG}=0.4	x_{TEG}=0.6	x_{TEG}=0.8	x_{TEG}=1
298	0.50	0.50	0.55	0.59	0.65	0.69	0.71	0.63	0.67
313	0.50	0.52	0.55	0.59	0.63	0.67	0.73	0.61	0.69
328	0.50	0.50	0.52	0.59	0.61	0.69	0.68	0.63	0.66
343	0.50	0.50	0.55	0.56	0.61	0.66	0.68	0.62	0.61
358	0.50	0.50	0.55	0.56	0.61	0.64	0.65	0.62	0.61

Table S2: Densities (ρ/g.cm^{-3}) of (Reline + TEG) mixtures at pressure p = 0.1 MPa and T = 298 K to 358 K as a function of mole fraction of TEG (x_{TEG}).

	Temperature (K)				
x_{TEG}	**298**	**313**	**328**	**343**	**358**
0.00	1.194	1.186	1.178	1.169	1.157
0.05	1.191	1.182	1.174	1.165	1.154
0.10	1.185	1.176	1.168	1.159	1.148
0.15	1.182	1.172	1.165	1.155	1.144
0.20	1.177	1.167	1.160	1.150	1.139
0.40	1.158	1.147	1.139	1.130	1.119
0.60	1.144	1.133	1.125	1.116	1.105
0.80	1.133	1.122	1.114	1.105	1.095
1.00	1.121	1.109	1.101	1.092	1.082