Supporting Information

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Thermodynamic characterization of binary mixtures of poly(propylene glycol) 425 with toluene and o-, m- and p-xylenes

Jelena Vuksanović[a], Danijela Soldatović[b], Ivona Radović[a], Zoran Višak[c] and Mirjana Kijevčanin[a]

[a]*Faculty of Technology and Metallurgy, University of Belgrade, Karnegijeva 4, 11120 Belgrade, Serbia*

[b]*Public Company Nuclear Facilities of Serbia, 12-14 Mike Petrovića Alasa, Vinča, 11351 Belgrade, Serbia*

[c]*School of Engineering and Applied Sciences, Aston University, Birmingham, B4 7ET, United Kingdom*

Table S1 - Densities ρ, Excess Molar Volumes V^E, Refractive Indices n_D, Refractive Index Deviations Δn_D, Viscosities η, Viscosity Deviations $\Delta\eta$ and excess Gibbs free energy of activation of viscous flow ΔG^{*E} of the PPG 425 (1) + toluene / o-xylene / m-xylene / p-xylene (2) systems at T = (288.15 to 333.15) K and at Atmospheric Pressure (0.1 MPa)[a]

x_1	$\rho/10^3$ kg·m^{-3}	$V^E/10^{-6}$ m^3·mol^{-1}	n_D	Δn_D	η/mPa·s	$\Delta\eta$/mPa·s	ΔG^{*E}/J·mol^{-1}
PPG 425 (1) + toluene (2)							
288.15 K							
0.0000	0.87150	-	1.49921	-	0.6284	-	-
0.1001	0.91579	-0.1886	1.48429	-0.0099	1.699	-12.55	1382.2
0.2002	0.94353	-0.3612	1.47397	-0.0152	4.091	-23.78	2358.7
0.2998	0.96226	-0.4865	1.46708	-0.0171	8.264	-33.16	2834.7
0.4003	0.97573	-0.5378	1.46278	-0.0164	15.49	-39.61	3065.1
0.5001	0.98565	-0.5244	1.45912	-0.0151	26.28	-42.41	3020.7
0.6000	0.99324	-0.4457	1.45647	-0.0127	41.05	-41.23	2742.2
0.6869	0.99864	-0.3796	1.45427	-0.0106	57.56	-36.55	2357.7
0.7985	1.00426	-0.2607	1.45222	-0.0070	82.10	-27.19	1646.7
0.9000	1.00847	-0.1449	1.45037	-0.0038	108.4	-14.81	872.8
1.0000	1.01191	-	1.44915		136.7	-	-
293.15 K							
0.0000	0.86684	-	1.49631	-	0.5926	-	-
0.1001	0.91124	-0.1813	1.48161	-0.0098	1.495	-8.643	1308.8
0.2002	0.93906	-0.3459	1.47158	-0.0149	3.515	-16.17	2316.0
0.2998	0.95785	-0.4620	1.46485	-0.0168	6.877	-22.31	2793.8
0.4003	0.97141	-0.5140	1.46062	-0.0161	12.32	-26.45	2990.3
0.5001	0.98145	-0.5142	1.45703	-0.0147	20.19	-28.10	2932.5
0.6000	0.98908	-0.4303	1.45443	-0.0124	30.64	-27.17	2651.0
0.6869	0.99452	-0.3664	1.45230	-0.0103	42.42	-23.67	2291.5
0.7985	1.00016	-0.2358	1.45027	-0.0069	58.96	-17.78	1585.5
0.9000	1.00440	-0.1185	1.44833	-0.0038	76.80	-9.616	838.5
1.0000	1.00794	-	1.44727	-	95.95	-	-
298.15 K							
0.0000	0.86218	-	1.49338	-	0.5698	-	-
0.1001	0.90669	-0.1751	1.47897	-0.0096	1.401	-6.062	1337.3
0.2002	0.93459	-0.3332	1.46920	-0.0146	3.086	-11.27	2270.4
0.2998	0.95348	-0.4489	1.46264	-0.0164	5.907	-15.31	2772.0
0.4003	0.96713	-0.5045	1.45848	-0.0157	10.20	-17.93	2951.6
0.5001	0.97725	-0.5079	1.45494	-0.0144	16.20	-18.81	2885.4
0.6000	0.98492	-0.4202	1.45239	-0.0122	23.92	-17.97	2601.7
0.6869	0.99041	-0.3592	1.45032	-0.0101	32.44	-15.44	2246.2
0.7985	0.99605	-0.2165	1.44832	-0.0067	44.10	-11.46	1552.2
0.9000	1.00032	-0.0949	1.44641	-0.0038	56.47	-6.079	821.8
1.0000	1.00394	-	1.44540	-	69.43	-	-
303.15 K							
0.0000	0.85751	-	1.49042	-	0.5410	-	-

0.1001	0.90213	-0.1685	1.47648	-0.0092	1.284	-4.371	1331.7
0.2002	0.93012	-0.3207	1.46682	-0.0142	2.718	-8.051	2241.5
0.2998	0.94910	-0.4340	1.46042	-0.0159	5.030	-10.83	2727.6
0.4003	0.96285	-0.4937	1.45631	-0.0153	8.472	-12.52	2909.4
0.5001	0.97305	-0.5014	1.45289	-0.0141	13.13	-12.96	2842.0
0.6000	0.98076	-0.4100	1.45035	-0.0119	18.99	-12.21	2563.0
0.6869	0.98630	-0.3526	1.44838	-0.0098	25.24	-10.40	2204.4
0.7985	0.99194	-0.1936	1.44636	-0.0066	33.76	-7.577	1526.83
0.9000	0.99623	-0.0685	1.44457	-0.0036	42.60	-3.923	810.0
1.0000	0.99995	-	1.44352	-	51.63	-	-
308.15 K							
0.0000	0.85283	-	1.48751	-	0.5140	-	-
0.1001	0.89756	-0.1625	1.47383	-0.0091	1.181	-3.219	1326.6
0.2002	0.92566	-0.3108	1.46443	-0.0139	2.416	-5.869	2220.3
0.2998	0.94473	-0.4235	1.45822	-0.0155	4.357	-7.794	2704.3
0.4003	0.95857	-0.4860	1.45417	-0.0150	7.136	-8.916	2874.4
0.5001	0.96885	-0.4979	1.45089	-0.0137	10.77	-9.157	2794.4
0.6000	0.97660	-0.4033	1.44833	-0.0117	15.27	-8.534	2516.6
0.6869	0.98219	-0.3485	1.44640	-0.0096	20.03	-7.151	2167.7
0.7985	0.98785	-0.1816	1.44442	-0.0065	26.37	-5.142	1501.7
0.9000	0.99217	-0.0546	1.44251	-0.0037	32.83	-2.616	796.2
1.0000	0.99595	-	1.44165	-	39.33	-	-
313.15 K							
0.0000	0.84815	-	1.48461	-	0.4854	-	-
0.1001	0.89299	-0.1562	1.47118	-0.0089	1.096	-2.400	1352.9
0.2002	0.92119	-0.3009	1.46205	-0.0136	2.164	-4.342	2219.3
0.2998	0.94038	-0.4174	1.45609	-0.0151	3.782	-5.719	2679.8
0.4003	0.95428	-0.4764	1.45205	-0.0146	6.040	-6.484	2838.1
0.5001	0.96463	-0.4915	1.44885	-0.0133	8.943	-6.581	2757.7
0.6000	0.97244	-0.3978	1.44630	-0.0114	12.47	-6.056	2482.8
0.6869	0.97807	-0.3431	1.44440	-0.0094	16.11	-5.028	2132.9
0.7985	0.98384	-0.2020	1.44244	-0.0064	20.93	-3.570	1478.5
0.9000	0.98821	-0.0829	1.44050	-0.0037	25.80	-1.747	787.5
1.0000	0.99195	-	1.43976	-	30.56	-	-
318.15 K							
0.0000	0.84344	-	1.48171	-	0.4646	-	-
0.1001	0.88840	-0.1498	1.46862	-0.0087	1.011	-1.840	1325.2
0.2002	0.91672	-0.2927	1.45974	-0.0132	1.947	-3.290	2188.2
0.2998	0.93601	-0.4093	1.45383	-0.0147	3.347	-4.264	2661.0
0.4003	0.95000	-0.4705	1.44991	-0.0143	5.238	-4.769	2817.5
0.5001	0.96042	-0.4871	1.44675	-0.0130	7.611	-4.775	2735.1
0.6000	0.96828	-0.3936	1.44428	-0.0111	10.43	-4.339	2459.1
0.6869	0.97395	-0.3373	1.44235	-0.0092	13.2	-3.560	2091.9
0.7985	0.97976	-0.1943	1.44049	-0.0062	17.00	-2.500	1459.0
0.9000	0.98416	-0.0755	1.43854	-0.0037	20.72	-1.200	777.1
1.0000	0.98794	-	1.43786	-	24.30	-	-
323.15 K							
0.0000	0.83873	-	1.47889	-	0.4421	-	-

0.1001	0.88381	-0.1440	1.46612	-0.0085	0.9399	-1.422	1327.0
0.2002	0.91225	-0.2852	1.45736	-0.0129	1.764	-2.517	2178.0
0.2998	0.93164	-0.4026	1.45155	-0.0145	2.971	-3.220	2647.1
0.4003	0.94572	-0.4658	1.44773	-0.0140	4.555	-3.564	2795.2
0.5001	0.95621	-0.4831	1.44463	-0.0128	6.491	-3.542	2703.3
0.6000	0.96413	-0.3921	1.44223	-0.0109	8.763	-3.185	2427.0
0.6869	0.96982	-0.3325	1.44051	-0.0089	11.05	-2.561	2082.9
0.7985	0.97567	-0.1870	1.43853	-0.0061	13.97	-1.787	1439.7
0.9000	0.98011	-0.0680	1.43686	-0.0034	16.86	-0.8410	770.1
1.0000	0.98393	-	1.43597	-	19.62	-	-
328.15 K							
0.0000	0.83400	-	1.47596	-	0.4209	-	-
0.1001	0.87920	-0.1382	1.46354	-0.0082	0.8793	-1.110	1339.8
0.2002	0.90777	-0.2791	1.45496	-0.0126	1.608	-1.950	2173.5
0.2998	0.92726	-0.3953	1.44932	-0.0141	2.650	-2.469	2630.9
0.4003	0.94144	-0.4644	1.44555	-0.0136	3.996	-2.697	2776.9
0.5001	0.95198	-0.4775	1.44254	-0.0125	5.593	-2.664	2675.4
0.6000	0.95997	-0.3900	1.44019	-0.0106	7.448	-2.375	2398.2
0.6869	0.96569	-0.3249	1.43853	-0.0086	9.318	-1.866	2062.9
0.7985	0.97152	-0.1534	1.43658	-0.0059	11.63	-1.304	1420.4
0.9000	0.97598	-0.0288	1.43503	-0.0032	13.91	-0.6095	753.0
1.0000	0.97993	-	1.43406	-	16.09	-	-
333.15 K							
0.0000	0.82925	-	1.47305	-	0.4035	-	-
0.1001	0.87459	-0.1325	1.46097	-0.0080	0.8386	-0.8687	1383.4
0.2002	0.90329	-0.2736	1.45266	-0.0122	1.473	-1.539	2156.2
0.2998	0.92289	-0.3928	1.44723	-0.0136	2.377	-1.932	2600.4
0.4003	0.93715	-0.4590	1.44349	-0.0132	3.512	-2.106	2730.7
0.5001	0.94775	-0.4726	1.44064	-0.0120	4.864	-2.053	2636.8
0.6000	0.95582	-0.3903	1.43824	-0.0103	6.415	-1.804	2367.2
0.6869	0.96156	-0.3188	1.43664	-0.0083	7.969	-1.382	2040.7
0.7985	0.96750	-0.1712	1.43463	-0.0058	9.830	-0.9741	1398.9
0.9000	0.97201	-0.0539	1.43310	-0.0032	11.71	-0.4157	749.5
1.0000	0.97592	-	1.43219	-	13.43	-	-
PPG 425 (1) + o-xylene (2)							
288.15 K							
0.0000	0.88391	-	1.50706	-	0.8690	-	-
0.1000	0.91924	0.0794	1.48945	-0.0118	2.147	-12.31	1190.8
0.2001	0.94343	0.0396	1.47947	-0.0160	4.999	-23.05	2138.1
0.3001	0.96119	-0.1085	1.47208	-0.0176	10.10	-31.54	2678.6
0.3995	0.97450	-0.2631	1.46653	-0.0174	18.07	-37.08	2885.6
0.5002	0.98463	-0.3190	1.46210	-0.0160	29.52	-39.30	2823.7
0.5993	0.99223	-0.2615	1.45873	-0.0136	45.58	-36.71	2616.7
0.7004	0.99845	-0.1610	1.45542	-0.0111	63.90	-32.12	2129.3
0.7996	1.00331	0.0159	1.45300	-0.0078	85.57	-23.93	1537.2
0.9010	1.00767	0.1315	1.45146	-0.0034	110.5	-12.77	811.9
1.0000	1.01191	-	1.44915	-	136.7	-	-
293.15 K							

0.0000	0.87972	-	1.50440	-	0.8175	-	-
0.1000	0.91500	0.0949	1.48701	-0.0117	1.886	-8.445	1115.2
0.2001	0.93920	0.0619	1.47719	-0.0158	4.216	-15.64	2051.7
0.3001	0.95699	-0.0840	1.46990	-0.0174	8.168	-21.20	2570.3
0.3995	0.97033	-0.2394	1.46441	-0.0172	14.17	-24.66	2776.9
0.5002	0.98049	-0.2963	1.46006	-0.0158	22.52	-25.88	2718.8
0.5993	0.98813	-0.2392	1.45652	-0.0136	33.81	-24.03	2510.3
0.7004	0.99437	-0.1388	1.45358	-0.0108	46.55	-20.90	2042.8
0.7996	0.99925	0.0367	1.45126	-0.0075	61.53	-15.36	1479.8
0.9010	1.00365	0.1472	1.44944	-0.0035	78.51	-8.025	785.1
1.0000	1.00794	-	1.44727	-	95.95	-	-
298.15 K							
0.0000	0.87551	-	1.50173	-	0.7661	-	-
0.1000	0.91075	0.1093	1.48461	-0.0115	1.732	-5.901	1148.2
0.2001	0.93496	0.0824	1.47492	-0.0155	3.659	-10.85	2024.7
0.3001	0.95279	-0.0620	1.46771	-0.0171	6.898	-14.48	2548.3
0.3995	0.96616	-0.2183	1.46227	-0.0170	11.58	-16.62	2741.9
0.5002	0.97636	-0.2765	1.45804	-0.0155	17.89	-17.23	2675.2
0.5993	0.98402	-0.2205	1.45462	-0.0134	26.19	-15.73	2465.4
0.7004	0.99029	-0.1223	1.45170	-0.0106	35.39	-13.47	2008.3
0.7996	0.99520	0.0503	1.44932	-0.0074	45.74	-9.938	1442.9
0.9010	0.99963	0.1555	1.44737	-0.0036	57.64	-5.001	770.6
1.0000	1.00394	-	1.44540	-	69.43	-	-
303.15 K							
0.0000	0.87130	-	1.49906	-	0.7220	-	-
0.1000	0.90650	0.1235	1.48223	-0.0113	1.571	-4.241	1131.1
0.2001	0.93072	0.1026	1.47265	-0.0153	3.191	-7.718	1981.9
0.3001	0.94858	-0.0400	1.46556	-0.0168	5.817	-10.18	2489.8
0.3995	0.96199	-0.1969	1.46016	-0.0167	9.497	-11.56	2674.8
0.5002	0.97222	-0.2564	1.45598	-0.0153	14.36	-11.83	2613.5
0.5993	0.97991	-0.2020	1.45263	-0.0131	20.56	-10.68	2402.8
0.7004	0.98621	-0.1063	1.44973	-0.0104	27.37	-9.005	1961.7
0.7996	0.99116	0.0622	1.44739	-0.0073	34.78	-6.652	1403.5
0.9010	0.99561	0.1621	1.44537	-0.0036	43.36	-3.229	753.8
1.0000	0.99995	-	1.44352	-	51.63	-	-
308.15 K							
0.0000	0.86707	-	1.49644	-	0.6809	-	-
0.1000	0.90224	0.1370	1.47986	-0.0111	1.434	-3.112	1120.3
0.2001	0.92658	0.1026	1.47039	-0.0151	2.815	-5.600	1952.6
0.3001	0.94436	-0.0192	1.46337	-0.0166	4.972	-7.308	2442.6
0.3995	0.95781	-0.1775	1.45814	-0.0164	7.903	-8.219	2616.4
0.5002	0.96813	-0.2564	1.45386	-0.0152	11.72	-8.295	2559.5
0.5993	0.97580	-0.1858	1.45054	-0.0131	16.44	-7.407	2347.2
0.7004	0.98213	-0.0932	1.44770	-0.0104	21.54	-6.210	1913.3
0.7996	0.98703	0.1004	1.44546	-0.0072	27.05	-4.533	1370.7
0.9010	0.99148	0.2094	1.44365	-0.0034	33.31	-2.191	734.0
1.0000	0.99595	-	1.44165	-	39.33	-	-
313.15 K							

0.0000	0.86283	-	1.49383	-	0.6437	-	-
0.1000	0.89797	0.1507	1.47748	-0.0109	1.321	-2.314	1121.7
0.2001	0.92221	0.1446	1.46826	-0.0148	2.501	-4.128	1924.7
0.3001	0.94015	0.0021	1.46133	-0.0163	4.280	-5.340	2391.4
0.3995	0.95362	-0.1563	1.45602	-0.0162	6.630	-5.965	2551.3
0.5002	0.96393	-0.2213	1.45187	-0.0149	9.628	-5.978	2491.1
0.5993	0.97168	-0.1669	1.44857	-0.0129	13.30	-5.270	2286.3
0.7004	0.97804	-0.0765	1.44579	-0.0102	17.19	-4.404	1860.8
0.7996	0.98307	0.0775	1.44354	-0.0070	21.40	-3.158	1337.5
0.9010	0.98760	0.1600	1.44186	-0.0033	26.08	-1.521	714.2
1.0000	0.99195	-	1.43976	-	30.56	-	-
318.15 K							
0.0000	0.85857	-	1.49124	-	0.6080	-	-
0.1000	0.89369	0.1636	1.47528	-0.0106	1.211	-1.766	1106.3
0.2001	0.91796	0.1643	1.46594	-0.0146	2.238	-3.111	1903.1
0.3001	0.93592	0.0230	1.45911	-0.0161	3.765	-3.953	2377.5
0.3995	0.94944	-0.1362	1.45386	-0.0160	5.726	-4.348	2536.6
0.5002	0.95980	-0.2090	1.44985	-0.0147	8.120	-4.340	2457.9
0.5993	0.96756	-0.1493	1.44660	-0.0126	11.03	-3.783	2249.4
0.7004	0.97395	-0.0615	1.44382	-0.0100	14.08	-3.125	1831.2
0.7996	0.97895	0.1127	1.44159	-0.0070	17.34	-2.213	1316.6
0.9010	0.98347	0.2072	1.43973	-0.0034	20.90	-1.058	701.0
1.0000	0.98794	-	1.43786	-	24.30	-	-
323.15 K							
0.0000	0.85430	-	1.48869	-	0.5757	-	-
0.1000	0.88941	0.1759	1.47295	-0.0105	1.120	-1.360	1102.1
0.2001	0.91370	0.1812	1.46360	-0.0145	2.017	-2.369	1885.7
0.3001	0.93170	0.0428	1.45685	-0.0160	3.313	-2.978	2345.6
0.3995	0.94524	-0.1163	1.45169	-0.0159	4.945	-3.239	2499.6
0.5002	0.95564	-0.1881	1.44775	-0.0146	6.906	-3.196	2421.8
0.5993	0.96343	-0.1302	1.44454	-0.0126	9.228	-2.761	2209.7
0.7004	0.96986	-0.0463	1.44183	-0.0099	11.66	-2.251	1800.6
0.7996	0.97491	0.1173	1.43961	-0.0069	14.23	-1.579	1293.9
0.9010	0.97947	0.2018	1.43788	-0.0033	16.99	-0.746	688.0
1.0000	0.98393	-	1.43597	-	19.62	-	-
328.15 K							
0.0000	0.85001	-	1.48604	-	0.5458	-	-
0.1000	0.88512	0.1877	1.47048	-0.0104	1.040	-1.061	1100.9
0.2001	0.90943	0.1995	1.46130	-0.0143	1.831	-1.826	1874.3
0.3001	0.92746	0.0632	1.45467	-0.0158	2.940	-2.271	2319.2
0.3995	0.94104	-0.0956	1.44959	-0.0157	4.312	-2.444	2467.7
0.5002	0.95146	-0.1631	1.44568	-0.0144	5.936	-2.385	2389.6
0.5993	0.95929	-0.1101	1.44256	-0.0123	7.821	-2.041	2174.6
0.7004	0.96576	-0.0287	1.43990	-0.0097	9.785	-1.648	1771.7
0.7996	0.97088	0.1181	1.43766	-0.0068	11.83	-1.142	1273.2
0.9010	0.97550	0.1858	1.43588	-0.0033	14.02	-0.530	676.6
1.0000	0.97993	-	1.43406	-	16.09	-	-
333.15 K							

0.0000	0.84571	-	1.48345	-	0.5221	-	-
0.1000	0.88081	0.1995	1.46822	-0.0101	0.9862	-0.827	1132.5
0.2001	0.90516	0.2171	1.45917	-0.0140	1.678	-1.427	1860.5
0.3001	0.92322	0.0843	1.45270	-0.0154	2.645	-1.750	2298.2
0.3995	0.93684	-0.0740	1.44769	-0.0153	3.818	-1.860	2441.8
0.5002	0.94729	-0.1447	1.44373	-0.0141	5.177	-1.801	2358.3
0.5993	0.95515	-0.0875	1.44048	-0.0122	6.743	-1.514	2146.0
0.7004	0.96166	-0.0095	1.43784	-0.0097	8.360	-1.202	1749.9
0.7996	0.96675	0.1551	1.43573	-0.0067	10.03	-0.818	1258.3
0.9010	0.97138	0.2283	1.43417	-0.0031	11.78	-0.372	667.7
1.0000	0.97592	-	1.43219	-	13.43	-	-
PPG 425 (1) + m-xylene (2)							
288.15 K							
0.0000	0.86856	-	1.49868	-	0.6601	-	-
0.0997	0.90777	0.0499	1.48574	-0.0080	1.610	-12.60	1089.2
0.2008	0.93495	0.0046	1.47572	-0.0130	3.743	-24.16	1952.1
0.3000	0.95418	-0.0546	1.46859	-0.0152	7.702	-33.78	2479.7
0.4008	0.96895	-0.1253	1.46362	-0.0152	14.12	-41.07	2663.0
0.4999	0.98012	-0.1490	1.46001	-0.0139	24.86	-43.39	2735.0
0.6014	0.98927	-0.1637	1.45738	-0.0115	37.86	-44.55	2399.0
0.6995	0.99649	-0.1690	1.45493	-0.0091	55.94	-39.96	2012.4
0.8004	1.00266	-0.1633	1.45248	-0.0066	78.86	-30.70	1456.1
0.9000	1.00774	-0.1245	1.45021	-0.0039	105.9	-17.18	784.9
1.0000	1.01191	-	1.44915	-	136.7	-	-
293.15 K							
0.0000	0.86427	-	1.49604	-	0.6322	-	-
0.0997	0.90355	0.0495	1.48315	-0.0080	1.450	-8.677	1033.3
0.2008	0.93068	0.0242	1.47342	-0.0129	3.228	-16.49	1882.1
0.3000	0.94995	-0.0336	1.46641	-0.0150	6.365	-22.86	2390.0
0.4008	0.96477	-0.1051	1.46146	-0.0150	11.22	-27.61	2557.2
0.4999	0.97596	-0.1228	1.45791	-0.0138	19.20	-28.79	2636.2
0.6014	0.98516	-0.1452	1.45537	-0.0114	28.55	-29.35	2313.0
0.6995	0.99243	-0.1577	1.45290	-0.0090	41.29	-26.07	1942.0
0.8004	0.99861	-0.1450	1.45056	-0.0064	57.08	-19.85	1404.9
0.9000	1.00373	-0.1167	1.44855	-0.0036	75.49	-10.94	760.4
1.0000	1.00794	-	1.44727	-	95.95	-	-
298.15 K							
0.0000	0.85998	-	1.49339	-	0.5969	-	-
0.0997	0.89926	0.0588	1.48071	-0.0079	1.338	-6.115	1059.5
0.2008	0.92640	0.0418	1.47112	-0.0127	2.851	-11.53	1880.8
0.3000	0.94572	-0.0151	1.46423	-0.0148	5.448	-15.80	2384.9
0.4008	0.96058	-0.0882	1.45936	-0.0148	9.341	-18.85	2552.7
0.4999	0.97181	-0.1071	1.45584	-0.0136	15.43	-19.36	2610.9
0.6014	0.98105	-0.1310	1.45335	-0.0112	22.38	-19.58	2287.5
0.6995	0.98835	-0.1447	1.45100	-0.0088	31.58	-17.20	1913.9
0.8004	0.99455	-0.1332	1.44863	-0.0063	42.72	-12.97	1380.5
0.9000	0.99970	-0.1061	1.44660	-0.0036	55.41	-7.137	742.6
1.0000	1.00394	-	1.44540	-	69.43	-	-

303.15 K							
0.0000	0.85568	-	1.49074	-	0.5674	-	-
0.0997	0.89494	0.0718	1.47824	-0.0078	1.229	-4.424	1052.3
0.2008	0.92212	0.0595	1.46884	-0.0125	2.524	-8.266	1856.9
0.3000	0.94149	0.0025	1.46209	-0.0145	4.670	-11.22	2349.3
0.4008	0.95639	-0.0707	1.45732	-0.0145	7.790	-13.24	2513.1
0.4999	0.96767	-0.0930	1.45383	-0.0133	12.51	-13.43	2562.5
0.6014	0.97694	-0.1176	1.45134	-0.0110	17.77	-13.48	2243.9
0.6995	0.98425	-0.1279	1.44906	-0.0086	24.57	-11.74	1873.6
0.8004	0.99049	-0.1227	1.44672	-0.0062	32.67	-8.768	1350.5
0.9000	0.99564	-0.0895	1.44473	-0.0035	41.75	-4.779	726.3
1.0000	0.99995	-	1.44352	-	51.63	-	-
308.15 K							
0.0000	0.85136	-	1.48810	-	0.5396	-	-
0.0997	0.89055	0.0950	1.47588	-0.0076	1.135	-3.268	1051.1
0.2008	0.91783	0.0759	1.46653	-0.0123	2.252	-6.053	1837.7
0.3000	0.93725	0.0192	1.45981	-0.0144	4.046	-8.130	2319.3
0.4008	0.95220	-0.0552	1.45507	-0.0144	6.582	-9.505	2478.7
0.4999	0.96353	-0.0820	1.45186	-0.0130	10.30	-9.509	2518.9
0.6014	0.97282	-0.1059	1.44933	-0.0109	14.36	-9.483	2205.1
0.6995	0.98016	-0.1164	1.44708	-0.0085	19.51	-8.179	1839.6
0.8004	0.98644	-0.1150	1.44484	-0.0061	25.54	-6.045	1325.4
0.9000	0.99162	-0.0882	1.44279	-0.0035	32.20	-3.255	713.0
1.0000	0.99595	-	1.44165	-	39.33	-	-
313.15 K							
0.0000	0.84703	-	1.48545	-	0.5112	-	-
0.0997	0.88621	0.1081	1.47328	-0.0076	1.057	-2.483	1074.7
0.2008	0.91353	0.0925	1.46422	-0.0121	2.028	-4.531	1838.7
0.3000	0.93300	0.0361	1.45771	-0.0140	3.513	-6.040	2284.1
0.4008	0.94800	-0.0386	1.45314	-0.0140	5.587	-6.990	2439.2
0.4999	0.95937	-0.0677	1.44989	-0.0127	8.556	-6.902	2475.0
0.6014	0.96871	-0.0931	1.44732	-0.0107	11.74	-6.839	2167.0
0.6995	0.97607	-0.1051	1.44509	-0.0084	15.72	-5.835	1808.5
0.8004	0.98238	-0.1060	1.44294	-0.0059	20.29	-4.278	1301.3
0.9000	0.98759	-0.0829	1.44110	-0.0032	25.27	-2.291	698.7
1.0000	0.99195	-	1.43976	-	30.56	-	-
318.15 K							
0.0000	0.84269	-	1.48280	-	0.4888	-	-
0.0997	0.88185	0.1235	1.47066	-0.0077	0.9774	-1.883	1051.7
0.2008	0.90923	0.1087	1.46195	-0.0119	1.832	-3.424	1815.1
0.3000	0.92875	0.0532	1.45567	-0.0136	3.125	-4.508	2275.2
0.4008	0.94380	-0.0226	1.45121	-0.0136	4.865	-5.168	2425.4
0.4999	0.95522	-0.0552	1.44795	-0.0124	7.283	-5.037	2450.1
0.6014	0.96458	-0.0800	1.44529	-0.0105	9.834	-4.962	2144.3
0.6995	0.97197	-0.0924	1.44311	-0.0082	12.97	-4.186	1788.0
0.8004	0.97831	-0.0963	1.44109	-0.0057	16.51	-3.041	1285.4
0.9000	0.98356	-0.0784	1.43936	-0.0030	20.30	-1.618	687.9
1.0000	0.98794	-	1.43786	-	24.30	-	-

323.15 K							
0.0000	0.83833	-	1.48017	-	0.4657	-	-
0.0997	0.87748	0.1372	1.46797	-0.0078	0.9115	-1.462	1054.8
0.2008	0.90492	0.1244	1.45962	-0.0117	1.667	-2.633	1808.9
0.3000	0.92449	0.0691	1.45367	-0.0132	2.780	-3.432	2259.4
0.4008	0.93959	-0.0071	1.44934	-0.0131	4.245	-3.898	2404.8
0.4999	0.95106	-0.0447	1.44595	-0.0121	6.233	-3.749	2421.9
0.6014	0.96045	-0.0675	1.44324	-0.0104	8.300	-3.674	2119.2
0.6995	0.96788	-0.0803	1.44103	-0.0082	10.81	-3.068	1767.3
0.8004	0.97424	-0.0863	1.43925	-0.0055	13.59	-2.204	1268.3
0.9000	0.97952	-0.0733	1.43769	-0.0027	16.55	-1.158	680.1
1.0000	0.98393	-	1.43597	-	19.62	-	-
328.15 K							
0.0000	0.83395	-	1.47757	-	0.4439	-	-
0.0997	0.87305	0.1600	1.46550	-0.0077	0.8524	-1.150	1059.7
0.2008	0.90061	0.1395	1.45728	-0.0116	1.525	-2.051	1806.5
0.3000	0.92023	0.0846	1.45154	-0.0130	2.490	-2.648	2247.0
0.4008	0.93537	0.0085	1.44720	-0.0129	3.738	-2.977	2389.6
0.4999	0.94690	-0.0327	1.44392	-0.0119	5.389	-2.828	2397.6
0.6014	0.95632	-0.0538	1.44123	-0.0102	7.086	-2.758	2097.6
0.6995	0.96377	-0.0650	1.43909	-0.0080	9.115	-2.281	1746.7
0.8004	0.97016	-0.0733	1.43736	-0.0054	11.35	-1.619	1255.5
0.9000	0.97548	-0.0665	1.43582	-0.0026	13.69	-0.8393	673.0
1.0000	0.97993	-	1.43406	-	16.09	-	-
333.15 K							
0.0000	0.82956	-	1.47489	-	0.4273	-	-
0.0997	0.86868	0.1710	1.46294	-0.0077	0.8014	-0.9209	1049.5
0.2008	0.89628	0.1557	1.45498	-0.0114	1.409	-1.622	1799.2
0.3000	0.91596	0.1012	1.44946	-0.0126	2.228	-2.100	2196.6
0.4008	0.93115	0.0263	1.44533	-0.0125	3.308	-2.330	2350.6
0.4999	0.94272	-0.0159	1.44197	-0.0116	4.678	-2.209	2344.5
0.6014	0.95218	-0.0381	1.43930	-0.0099	6.130	-2.109	2070.5
0.6995	0.95966	-0.0506	1.43718	-0.0078	7.772	-1.757	1713.1
0.8004	0.96609	-0.0627	1.43545	-0.0053	9.552	-1.282	1218.2
0.9000	0.97144	-0.0614	1.43396	-0.0025	11.43	-0.7034	644.4
1.0000	0.97592	-	1.43219	-	13.43	-	-
PPG 425 (1) + p-xylene (2)							
288.15 K							
0.0000	0.86531	-	1.49770	-	0.6862	-	-
0.0500	0.88751	0.0275	-	-	-	-	-
0.1000	0.90566	0.0075	1.48429	-0.0086	1.578	-12.71	951.6
0.2003	0.93363	-0.1274	1.47452	-0.0135	3.556	-24.38	1756.4
0.3003	0.95346	-0.2050	1.46746	-0.0157	7.193	-34.34	2241.8
0.4001	0.96854	-0.3210	1.46250	-0.0158	13.29	-41.82	2466.4
0.4999	0.97999	-0.3428	1.45896	-0.0145	22.08	-46.61	2399.5
0.5998	0.98936	-0.4158	1.45662	-0.0120	35.37	-46.91	2216.9
0.6987	0.99668	-0.3878	1.45441	-0.0094	52.96	-42.78	1860.3
0.8010	1.00285	-0.3097	1.45240	-0.0064	76.74	-32.91	1361.6

0.9001	1.00774	-0.1672	1.45082	-0.0032	104.5	-18.61	740.7
1.0000	1.01191	-	1.44915	-	136.7	-	-
293.15 K							
0.0000	0.86097	-	1.49493	-	0.6515	-	-
0.0500	0.88317	0.0346	-	-	-	-	-
0.1000	0.90131	0.0211	1.48177	-0.0084	1.389	-8.793	856.5
0.2003	0.92932	-0.1081	1.47220	-0.0132	3.075	-16.67	1706.6
0.3003	0.94918	-0.1784	1.46528	-0.0153	5.967	-23.30	2172.4
0.4001	0.96433	-0.3004	1.46042	-0.0154	10.60	-28.18	2379.1
0.4999	0.97583	-0.3244	1.45692	-0.0142	17.42	-30.87	2357.8
0.5998	0.98520	-0.3858	1.45461	-0.0117	27.09	-30.24	2173.0
0.6987	0.99258	-0.3680	1.45243	-0.0092	39.57	-27.67	1823.3
0.8010	0.99882	-0.3053	1.45046	-0.0063	55.60	-21.39	1316.0
0.9001	1.00374	-0.1656	1.44890	-0.0031	74.49	-11.95	717.3
1.0000	1.00794	-	1.44727	-	95.95	-	-
298.15 K							
0.0000	0.85663	-	1.49221	-	0.6168	-	-
0.0500	0.87881	0.0421	-	-	-	-	-
0.1000	0.89696	0.0338	1.47936	-0.0082	1.314	-6.185	935.9
0.2003	0.92501	-0.0912	1.46989	-0.0129	2.722	-11.68	1702.4
0.3003	0.94487	-0.1516	1.46317	-0.0150	5.123	-16.16	2166.6
0.4001	0.96012	-0.2823	1.45838	-0.0151	8.836	-19.32	2369.3
0.4999	0.97167	-0.3094	1.45493	-0.0139	14.10	-20.92	2341.4
0.5998	0.98106	-0.3691	1.45264	-0.0120	21.27	-20.62	2145.5
0.6987	0.98848	-0.3547	1.45047	-0.0090	30.30	-18.40	1793.1
0.8010	0.99479	-0.3040	1.44851	-0.0062	41.67	-14.07	1292.6
0.9001	0.99975	-0.1741	1.44698	-0.0031	54.74	-7.820	701.1
1.0000	1.00394	-	1.44540	-	69.43	-	-
303.15 K							
0.0000	0.85227	-	1.48939	-	0.5848	-	-
0.0500	0.87445	0.0488	-	-	-	-	-
0.1000	0.89261	0.0458	1.47680	-0.0080	1.208	-4.481	935.6
0.2003	0.92069	-0.0741	1.46757	-0.0126	2.418	-8.391	1688.7
0.3003	0.94060	-0.1321	1.46103	-0.0146	4.410	-11.50	2143.0
0.4001	0.95590	-0.2647	1.45635	-0.0147	7.402	-13.61	2341.7
0.4999	0.96751	-0.2942	1.45297	-0.0135	11.51	-14.59	2309.9
0.5998	0.97693	-0.3538	1.45068	-0.0117	16.94	-14.26	2109.3
0.6987	0.98438	-0.3405	1.44851	-0.0088	23.63	-12.62	1759.0
0.8010	0.99074	-0.2984	1.44659	-0.0061	31.91	-9.562	1266.1
0.9001	0.99572	-0.1689	1.44506	-0.0031	41.25	-5.279	685.3
1.0000	0.99995	-	1.44352	-	51.63	-	-
308.15 K							
0.0000	0.84791	-	1.48658	-	0.5548	-	-
0.0500	0.87008	0.0566	-	-	-	-	-
0.1000	0.88824	0.0576	1.47427	-0.0078	1.115	-3.317	936.1
0.2003	0.91637	-0.0584	1.46527	-0.0123	2.162	-6.159	1677.0
0.3003	0.93632	-0.1113	1.45884	-0.0142	3.833	-8.366	2122.1
0.4001	0.95168	-0.2487	1.45427	-0.0143	6.270	-9.799	2314.2

0.4999	0.96334	-0.2820	1.45094	-0.0132	9.539	-10.40	2282.1
0.5998	0.97279	-0.3391	1.44870	-0.0114	13.74	-10.07	2078.3
0.6987	0.98028	-0.3299	1.44655	-0.0086	18.81	-8.842	1729.9
0.8010	0.98668	-0.2938	1.44465	-0.0059	24.97	-6.644	1243.6
0.9001	0.99169	-0.1623	1.44313	-0.0030	31.82	-3.640	672.0
1.0000	0.99595	-	1.44165	-	39.33	-	-
313.15 K							
0.0000	0.84353	-	1.48391	-	0.5247	-	-
0.0500	0.86569	0.0640	-	-	-	-	-
0.1000	0.88387	0.0690	1.47187	-0.0076	1.039	-2.489	962.9
0.2003	0.91205	-0.0424	1.46305	-0.0120	1.951	-4.589	1683.5
0.3003	0.93209	-0.1051	1.45671	-0.0139	3.344	-6.200	2099.0
0.4001	0.94746	-0.2316	1.45220	-0.0140	5.331	-7.210	2278.4
0.4999	0.95916	-0.2669	1.44885	-0.0130	7.956	-7.582	2246.8
0.5998	0.96866	-0.3275	1.44668	-0.0112	11.25	-7.288	2043.0
0.6987	0.97618	-0.3172	1.44456	-0.0085	15.16	-6.348	1699.3
0.8010	0.98262	-0.2891	1.44270	-0.0058	19.85	-4.731	1221.1
0.9001	0.98761	-0.1401	1.44120	-0.0030	24.98	-2.578	658.9
1.0000	0.99195	-	1.43976	-	30.56	-	-
318.15 K							
0.0000	0.83914	-	1.48126	-	0.5001	-	-
0.0500	0.86130	0.0711	-	-	-	-	-
0.1000	0.87950	0.0797	1.46938	-0.0075	0.9605	-1.920	946.0
0.2003	0.90771	-0.0273	1.46070	-0.0119	1.764	-3.503	1667.2
0.3003	0.92791	-0.1113	1.45442	-0.0138	2.976	-4.672	2094.8
0.4001	0.94323	-0.2153	1.44997	-0.0139	4.655	-5.368	2274.5
0.4999	0.95499	-0.2536	1.44678	-0.0128	6.812	-5.587	2232.3
0.5998	0.96453	-0.3189	1.44463	-0.0111	9.440	-5.337	2025.7
0.6987	0.97207	-0.3052	1.44255	-0.0084	12.52	-4.607	1682.1
0.8010	0.97855	-0.2806	1.44074	-0.0058	16.16	-3.402	1207.4
0.9001	0.98358	-0.1405	1.43929	-0.0029	20.08	-1.843	649.9
1.0000	0.98794	-	1.43786	-	24.30	-	-
323.15 K							
0.0000	0.83474	-	1.47853	-	0.4753	-	-
0.0500	0.85689	0.0780	-	-	-	-	-
0.1000	0.87512	0.0896	1.46694	-0.0073	0.8959	-1.494	953.7
0.2003	0.90338	-0.0127	1.45838	-0.0116	1.607	-2.703	1666.3
0.3003	0.92357	-0.0825	1.45225	-0.0135	2.653	-3.571	2086.7
0.4001	0.93899	-0.1989	1.44786	-0.0136	4.070	-4.065	2260.3
0.4999	0.95081	-0.2406	1.44470	-0.0126	5.834	-4.212	2211.8
0.5998	0.96040	-0.3131	1.44258	-0.0109	7.979	-3.979	2004.7
0.6987	0.96796	-0.2924	1.44057	-0.0082	10.45	-3.406	1663.6
0.8010	0.97449	-0.2760	1.43880	-0.0056	13.32	-2.492	1193.5
0.9001	0.97952	-0.1273	1.43735	-0.0029	16.37	-1.339	641.9
1.0000	0.98393	-	1.43597	-	19.62	-	-
328.15 K							
0.0000	0.83032	-	1.47608	-	0.4521	-	-
0.0500	0.85248	0.0847	-	-	-	-	-

0.1000	0.87072	0.0999	1.46451	-0.0074	0.8376	-1.178	961.7
0.2003	0.89904	0.0014	1.45600	-0.0117	1.472	-2.113	1668.8
0.3003	0.91929	-0.0683	1.45017	-0.0133	2.383	-2.766	2082.7
0.4001	0.93475	-0.1826	1.44596	-0.0133	3.589	-3.120	2249.8
0.4999	0.94662	-0.2264	1.44254	-0.0125	5.068	-3.202	2199.7
0.5998	0.95625	-0.2961	1.44046	-0.0104	6.829	-3.003	1989.5
0.6987	0.96384	-0.2777	1.43872	-0.0080	8.825	-2.553	1648.1
0.8010	0.97042	-0.2696	1.43684	-0.0056	11.12	-1.856	1180.7
0.9001	0.97546	-0.1120	1.43537	-0.0029	13.54	-0.993	633.9
1.0000	0.97993	-	1.43406	-	16.09	-	-
333.15 K							
0.0000	0.82588	-	1.47328	-	0.4342	-	-
0.0500	0.84805	0.0901	-	-	-	-	-
0.1000	0.86632	0.1095	1.46203	-0.0071	0.7606	-0.973	859.4
0.2003	0.89468	0.0159	1.45383	-0.0112	1.364	-1.673	1673.1
0.3003	0.91495	-0.0422	1.44796	-0.0130	2.155	-2.182	2064.1
0.4001	0.93050	-0.1650	1.44378	-0.0131	3.190	-2.443	2224.4
0.4999	0.94242	-0.2107	1.44065	-0.0121	4.451	-2.479	2179.4
0.5998	0.95207	-0.2743	1.43869	-0.0104	5.920	-2.309	1968.6
0.6987	0.95971	-0.2603	1.43673	-0.0078	7.562	-1.952	1628.2
0.8010	0.96635	-0.2620	1.43493	-0.0054	9.437	-1.406	1166.5
0.9001	0.97141	-0.1053	1.43354	-0.0028	11.37	-0.760	622.8
1.0000	0.97592	-	1.43219	-	13.43	-	-

[a] x_1 is the mole fraction of PPG 425. Standard uncertainties u for each variables are $u(T) = 0.01$ K; $u(p) = 0.005$ MPa; $u(x_1) = 0.0001$, and the combined expanded uncertainties U_c are $U_c(\rho) = 1\ \mathrm{kg \cdot m^{-3}}$; $U_c(n_D) = 2\times10^{-4}$ and $U_c(\eta) = 2$ %, with 0.95 level of confidence ($k \approx 2$).

Table S2 - Parameters A_p of Eq. (5) and the Corresponding rmsd σ for the Binary Mixtures at Temperature T and at Atmospheric Pressure (0.1 MPa)[a]

Function	T /K	A_0	A_1	A_2	A_3	A_4	σ
PPG 425 (1) + toluene (2)							
$V^E/10^{-6}$ m^3·mol^{-1}	288.15	-2.0875	0.8806	0.3911	-0.9315	-	0.0055
	293.15	-2.0114	0.7824	0.5517	-0.5548	-	0.0077
	298.15	-1.9924	0.7103	0.7672	-0.2379	-	0.0095
	303.15	-1.9681	0.6451	1.0206	0.0748	-	0.0119
	308.15	-1.9499	0.5952	1.1628	0.2406	-	0.0136
	313.15	-1.9024	0.5967	0.8984	-0.1392	-	0.0127
	318.15	-1.8851	0.5773	0.9971	-0.1044	-	0.0126
	323.15	-1.8732	0.5573	1.0924	-0.0528	-	0.0118
	328.15	-1.8825	0.5466	1.4934	0.3317	-	0.0112
	333.15	-1.8494	0.5699	1.2729	-0.0395	-	0.0082
Δn_D	288.15	-0.0604	0.0425	-0.0245	-	-	0.0002
	293.15	-0.0589	0.0412	-0.0263	-	-	0.0001
	298.15	-0.0576	0.0404	-0.0261	-	-	0.0002
	303.15	-0.0563	0.0389	-0.0238	-	-	0.0001
	308.15	-0.0549	0.0372	-0.0254	-	-	0.0001
	313.15	-0.0532	0.0360	-0.0269	-	-	0.0001
	318.15	-0.0519	0.0346	-0.0265	-	-	0.0001
	323.15	-0.0512	0.0352	-0.0231	-	-	0.0001
	328.15	-0.0500	0.0347	-0.0211	-	-	0.0001
	333.15	-0.0480	0.0333	-0.0220	-	-	0.0001
$\Delta\eta$/mPas·s	288.15	-169.62	-16.94	30.24	-	-	0.4184
	293.15	-112.4	-7.892	18.52	-	-	0.3373
	298.15	-75.26	-0.6691	12.89	-	-	0.2402
	303.15	-51.83	3.018	9.104	-	-	0.1648
	308.15	-36.63	3.986	6.834	-	-	0.1187
	313.15	-26.33	4.411	5.292	-	-	0.0900
	318.15	-19.10	4.417	3.485	-	-	0.0723
	323.15	-14.17	3.962	2.586	-	-	0.0576
	328.15	-10.66	3.458	1.745	-	-	0.0502
	333.15	-8.214	3.143	1.690	-	-	0.0509
ΔG^{*E}/kJ·kmol^{-1}	288.15	12074.1	-3524.6	885.6	-	-	17.4
	293.15	11768.5	-3561.7	704.3	-	-	25.4
	298.15	11571.4	-3654.8	860.5	-	-	13.4
	303.15	11387.0	-3646.5	926.3	-	-	10.2
	308.15	11211.9	-3700.7	1041.0	-	-	10.2
	313.15	11046.6	-3810.7	1351.8	-	-	10.2
	318.15	10952.6	-3803.2	1159.6	-	-	3.8
	323.15	10844.2	-3834.8	1274.8	-	-	8.5
	328.15	10729.7	-3946.1	1411.8	-	-	11.5

	333.15	10557.9	-3973.1	1782.7	-	-	22.4
PPG 425 (1) + o-xylene (2)							
$V^E/10^{-6}\,m^3\cdot mol^{-1}$	288.15	-1.2760	-0.4802	3.9108	1.2027	-	0.0059
	293.15	-1.1902	-0.5176	4.0920	1.2078	-	0.0065
	298.15	-1.1060	-0.5481	4.1458	1.2063	-	0.0069
	303.15	-1.0228	-0.5813	4.1902	1.1849	-	0.0073
	308.15	-1.0254	-0.6589	4.6272	1.7929	-	0.0073
	313.15	-0.8789	-0.5663	4.3774	0.6039	-	0.0089
	318.15	-0.8256	-0.7595	4.5930	1.5566	-	0.0157
	323.15	-0.7529	-0.7077	4.5694	1.2474	-	0.0151
	328.15	-0.6525	-0.6264	4.5689	0.5800	-	0.0113
	333.15	-0.5749	-0.7277	4.7188	1.3227	-	0.0164
Δn_D	288.15	-0.0631	0.0382	-0.0345	0.0114	-	0.0003
	293.15	-0.0631	0.0358	-0.0261	0.0220	-	0.0003
	298.15	-0.0620	0.0345	-0.0268	0.0239	-	0.0003
	303.15	-0.0608	0.0346	-0.0277	0.0215	-	0.0003
	308.15	-0.0605	0.0333	-0.0248	0.0224	-	0.0003
	313.15	-0.0596	0.0326	-0.0232	0.0233	-	0.0003
	318.15	-0.0585	0.0336	-0.0248	0.0182	-	0.0002
	323.15	-0.0583	0.0330	-0.0237	0.0189	-	0.0002
	328.15	-0.0573	0.0336	-0.0236	0.0166	-	0.0002
	333.15	-0.0563	0.0300	-0.0233	0.0238	-	0.0002
$\Delta\eta$/mPas·s	288.15	-155.8	-4.122	24.78	-	-	0.3472
	293.15	-103.1	1.318	18.24	-	-	0.2394
	298.15	-68.47	5.900	11.93	-	-	0.1816
	303.15	-47.10	6.829	8.431	-	-	0.1534
	308.15	-33.18	6.259	5.595	-	-	0.1147
	313.15	-23.81	5.498	3.665	-	-	0.0788
	318.15	-17.24	4.871	2.277	-	-	0.6691
	323.15	-12.69	4.277	1.402	-	-	0.0375
	328.15	-9.482	3.690	0.9026	-	-	0.0280
	333.15	-7.120	3.247	0.5318	-	-	0.0221
ΔG^{*E}/kJ·kmol^{-1}	288.15	11424.9	-3022.1	-75.5	-	-	24.9
	293.15	10926.3	-2899.1	126.5	-	-	32.1
	298.15	10778.0	-3036.2	128.2	-	-	21.5
	303.15	10519.4	-3005.0	154.7	-	-	19.1
	308.15	10291.1	-3016.3	222.3	-	-	16.8
	313.15	10034.6	-3001.6	406.3	-	-	13.2
	318.15	9923.7	-3055.6	371.9	-	-	15.7
	323.15	9765.3	-3082.1	464.3	-	-	13.5
	328.15	9623.1	-3130.7	582.0	-	-	11.7
	333.15	9491.8	-3181.2	801.1	-	-	8.0
PPG 425 (1) + m-xylene (2)							
$V^E/10^{-6}\,m^3\cdot mol^{-1}$	288.15	-0.5962	-0.4439	0.2843	-1.1982	-	0.0050

	293.15	-0.4913	-0.5881	0.2176	-0.9257	-	0.0104
	298.15	-0.4284	-0.6350	0.2949	-0.8414	-	0.0105
	303.15	-0.3722	-0.6520	0.4561	-0.7665	-	0.0084
	308.15	-0.3280	-0.6372	0.5763	-0.9974	-	0.0064
	313.15	-0.2711	-0.6657	0.6438	-1.0341	-	0.0060
	318.15	-0.2211	-0.6565	0.7384	-1.1664	-	0.0048
	323.15	-0.1789	-0.6366	0.8324	-1.2878	-	0.0041
	328.15	-0.1310	-0.1310	-0.1310	-0.1310	-	0.0046
	333.15	-0.0638	-0.6103	1.0431	-1.5585	-	0.0043
Δn_D	288.15	-0.0554	0.0366	-0.0169	-0.0113	-	0.0009
	293.15	-0.0547	0.0377	-0.0153	-0.0110	-	0.0008
	298.15	-0.0537	0.0390	-0.0155	-0.0150	-	0.0008
	303.15	-0.0528	0.0357	-0.0157	-0.0088	-	0.0008
	308.15	-0.0519	0.0384	-0.0153	-0.0160	-	0.0008
	313.15	-0.0508	0.0351	-0.0148	-0.0073	-	0.0007
	318.15	-0.0496	0.0317	-0.0152	0.0013	-	0.0008
	323.15	-0.0482	0.0283	-0.0157	0.0113	-	0.0007
	328.15	-0.0476	0.0275	-0.0154	0.0127	-	0.0007
	333.15	-0.0462	0.0253	-0.0167	0.0172	-	0.0007
$\Delta\eta$/mPas·s	288.15	-179.0	-38.30	20.74	10.71	-	0.5770
	293.15	-119.0	-19.95	15.21	6.544	-	0.4225
	298.15	-80.24	-8.670	10.11	2.749	-	0.3065
	303.15	-55.84	-3.240	7.194	1.421	-	0.2373
	308.15	-39.67	-0.4275	5.172	1.047	-	0.1834
	313.15	-28.93	1.343	3.821	-0.0812	-	0.1489
	318.15	-21.12	1.982	2.536	-0.1316	-	0.1115
	323.15	-15.81	2.246	1.915	-0.1565	-	0.0925
	328.15	-11.98	2.229	1.411	-0.0703	-	0.0760
	333.15	-9.256	2.252	0.4218	-1.232	-	0.0492
ΔG^{*E}/kJ·kmol^{-1}	288.15	10697.4	-2542.8	-273.7	-	-	31.3
	293.15	10321.4	-2399.2	-343.1	-	-	33.5
	298.15	10241.0	-2581.4	-260.6	-	-	28.3
	303.15	10024.7	-2564.2	11.3	-	-	27.8
	308.15	9890.0	-2664.9	-87.7	-	-	24.7
	313.15	9702.8	-2783.2	273.6	-	-	21.4
	318.15	9607.7	-2724.4	228.3	-	-	21.9
	323.15	9507.8	-2784.9	287.9	-	-	20.2
	328.15	9422.5	-2839.7	383.6	-	-	18.8
	333.15	9269.2	-2914.8	299.5	-	-	13.0
PPG 425 (1) + p-xylene (2)							
$V^E/10^{-6}$ m^3·mol^{-1}	288.15	-1.0341	0.1715	-0.6304	-3.5982	-	0.0112
	293.15	-0.9985	0.1287	-0.5625	-3.6314	-	0.0111
	298.15	-0.9648	0.067	-0.5187	-3.6516	-	0.0116
	303.15	-0.9371	0.0609	-0.4381	-3.7342	-	0.0103

	308.15	-0.9005	0.0141	-0.3752	-3.7472	-	0.0109
	313.15	-0.8577	-0.0343	-0.3248	-3.7583	-	0.0114
	318.15	-0.8196	-0.1301	-0.2223	-3.5913	-	1.9034
	323.15	-0.7895	-0.1097	-0.1728	-3.7372	-	0.0133
	328.15	-0.753	-0.1468	-0.1115	-3.7199	-	0.0137
	333.15	-0.7141	-0.1732	-0.0518	-3.7063	-	0.0147
Δn_D	288.15	-0.0577	0.0375	-0.0124	-	-	0.0001
	293.15	-0.0563	0.0365	-0.0122	-	-	0.0001
	298.15	-0.0556	0.0350	-0.0115	-	-	0.0001
	303.15	-0.0540	0.0339	-0.0120	-	-	0.0001
	308.15	-0.0528	0.0332	-0.0115	-	-	0.0001
	313.15	-0.0515	0.0320	-0.0114	-	-	0.0001
	318.15	-0.0513	0.0320	-0.0105	-	-	0.0001
	323.15	-0.0504	0.0309	-0.0095	-	-	0.0001
	328.15	-0.0493	0.0305	-0.0099	-	-	0.0001
	333.15	-0.0482	0.0301	-0.0102	-	-	0.0001
$\Delta\eta$/mPas·s	288.15	-186.5	-45.69	19.60	-	-	0.3017
	293.15	-122.9	-24.87	10.51	-	-	0.1676
	298.15	-83.60	-12.82	8.455	-	-	0.0562
	303.15	-58.36	-6.447	6.080	-	-	0.0333
	308.15	-41.61	-2.696	4.416	-	-	0.1093
	313.15	-30.34	-0.7823	3.300	-	-	0.0073
	318.15	-22.44	0.3965	2.342	-	-	0.0812
	323.15	-16.84	1.014	1.696	-	-	0.0046
	328.15	-12.86	1.322	1.324	-	-	0.0035
	333.15	-9.915	1.410	1.410	-	-	0.0141
ΔG^{*E}/kJ·kmol^{-1}	288.15	9720.0	-2043.4	-140.3	-	-	30.7
	293.15	9516.2	-1834.1	-612.2	-	-	40.2
	298.15	9362.2	-2099.1	18.0	-	-	22.4
	303.15	9231.1	-2164.1	38.1	-	-	20.7
	308.15	9123.9	-2222.7	38.2	-	-	18.2
	313.15	8999.1	-2332.4	142.7	-	-	9.9
	318.15	8917.5	-2360.9	215.1	-	-	15.6
	323.15	8839.3	-2434.9	314.2	-	-	14.4
	328.15	8785.8	-2519.3	377.8	-	-	13.0
	333.15	8763.2	-2406.5	-204.5	-	-	37.5

[a] x_1 is the mole fraction of PPG 425. Standard uncertainties u for each variables are $u(T) = 0.01$ K; $u(p) = 0.005$ MPa; $u(x_1) = 0.0001$.