

## Supplementary Material

**Table S1** Relative deviation (in %) <sup>a</sup> of the predicted specific volumes of Poly ethylene-co-1-butene with  $x_{1\text{-butene}} = 0.864$  using the proposed EoS at several isotherms, compared with the literature data [1].

<i>P</i> /MPa	425.24	434.75	444.75	455.35	465.22	475.34	485.06	495.15	505.89
0.1	-5.14	-4.78	-4.35	-3.89	-3.30	-2.57	-1.91	-1.09	-0.10
10	-4.62	-4.25	-3.83	-3.36	-2.81	-2.12	-1.50	-0.72	0.18
20	-4.15	-3.78	-3.37	-2.87	-2.38	-1.73	-1.15	-0.41	0.43
30	-3.74	-3.38	-3.00	-2.52	-2.01	-1.44	-0.88	-0.21	0.57
40	-3.38	-3.03	-2.65	-2.21	-1.73	-1.16	-0.66	-0.03	0.69
50	-3.05	-2.71	-2.34	-1.92	-1.47	-0.93	-0.43	0.12	0.79
60	-2.74	-2.41	-2.06	-1.67	-1.23	-0.73	-0.26	0.25	0.88
70	-2.46	-2.14	-1.81	-1.43	-1.03	-0.55	-0.12	0.40	0.95
80	-2.19	-1.89	-1.58	-1.21	-0.83	-0.38	0.02	0.50	1.06
90	-1.95	-1.66	-1.36	-1.01	-0.64	-0.22	0.16	0.61	1.12
100	-1.71	-1.43	-1.16	-0.82	-0.47	-0.08	0.28	0.70	1.18
110	-1.49	-1.22	-0.96	-0.64	-0.32	0.06	0.41	0.78	1.24
120	-1.28	-1.01	-0.76	-0.47	-0.16	0.21	0.51	0.88	1.30
130	-1.08	-0.82	-0.60	-0.31	0.00	0.33	0.63	0.96	1.37
140	-0.88	-0.63	-0.42	-0.14	0.14	0.46	0.72	1.05	1.43
150	-0.69	-0.45	-0.25	0.00	0.29	0.59	0.84	1.14	1.49
160	-0.51	-0.27	-0.09	0.16	0.42	0.71	0.93	1.22	1.55
170	-0.34	-0.11	0.07	0.30	0.55	0.81	1.04	1.31	1.63
180	-0.16	0.07	0.22	0.44	0.67	0.93	1.14	1.38	1.69
190	<b>0.00<sup>b</sup></b>	0.21	0.36	0.58	0.80	1.04	1.24	1.47	1.76
200	0.15	0.38	0.50	0.70	0.91	1.15	1.33	1.54	1.83

$${}^a RD = \left( \frac{V^{Calc.} - V^{Exp.}}{V^{Exp.}} \right) \cdot 100$$

<sup>b</sup> Bold face represents the *PVT* point, at which  $\lambda$  has been fixed.

**Table S2** Relative deviation (in %) <sup>a</sup> of the predicted specific volumes of Poly ethylene-co-1-butene with  $x_{1\text{-butene}} = 0.595$  using the proposed EoS at several isotherms, compared with the literature data [1].

<i>P</i> / MPa	424.48	433.74	443.82	454.18	464.52	474.15	484.04	493.79	504.43
0.1	-3.04	-2.45	-1.67	-0.78	0.22	1.18	2.40	3.49	4.53
10	-2.74	-2.18	-1.46	-0.67	0.23	1.10	2.15	3.30	4.11
20	-2.47	-1.94	-1.28	-0.56	0.26	1.04	1.99	2.94	3.73
30	-2.24	-1.76	-1.14	-0.49	0.26	0.96	1.79	2.64	3.65
40	-2.04	-1.59	-1.02	-0.43	0.26	0.89	1.63	2.38	3.30
50	-1.87	-1.44	-0.91	-0.37	0.25	0.82	1.50	2.17	2.96
60	-1.70	-1.31	-0.82	-0.31	0.25	0.77	1.38	1.98	2.69
70	-1.55	-1.18	-0.72	-0.26	0.26	0.73	1.27	1.83	2.47
80	-1.40	-1.06	-0.63	-0.20	0.26	0.69	1.20	1.69	2.28
90	-1.27	-0.95	-0.56	-0.15	0.27	0.67	1.13	1.58	2.12
100	-1.13	-0.83	-0.47	-0.09	0.30	0.66	1.09	1.49	1.99
110	-1.01	-0.73	-0.39	-0.03	0.32	0.66	1.04	1.40	1.87
120	-0.89	-0.62	-0.30	0.01	0.34	0.66	1.01	1.35	1.77
130	-0.77	-0.51	-0.23	0.07	0.38	0.66	0.99	1.30	1.69
140	-0.65	-0.41	-0.15	0.12	0.42	0.68	0.97	1.26	1.62
150	-0.53	-0.31	-0.07	0.19	0.45	0.69	0.97	1.23	1.56
160	-0.42	-0.21	0.03	0.25	0.50	0.71	0.97	1.21	1.52
170	-0.31	-0.12	0.10	0.32	0.54	0.73	0.98	1.19	1.49
180	-0.21	-0.01	0.19	0.38	0.59	0.77	0.98	1.18	1.46
200	<b>0.00<sup>b</sup></b>	0.17	0.34	0.50	0.68	0.82	1.01	1.18	1.42

$${}^a RD = \left( \frac{V^{Calc.} - V^{Exp.}}{V^{Exp.}} \right) \cdot 100$$

<sup>b</sup> Bold face represents the *PVT* point, at which  $\lambda$  has been fixed.

**Table S3** Relative deviation (in %) <sup>a</sup> of the predicted specific volumes of Poly ethylene glycol-200 (1) + water (2) from the ISM EoS at several isotherms, compared with the experimental data [2].

<i>T/K</i>	<i>x</i> <sub>2</sub>										
	1.00	0.968	0.930	0.886	0.833	0.769	0.690	0.588	0.455	0.270	0.00
283.15	0.458	0.934	1.312	1.627	1.879	2.094	2.178	2.351	2.069	1.207	2.248
293.15	0.378	0.861	1.263	1.587	1.840	2.020	2.007	2.040	1.511	0.325	1.167
303.15	0.343	0.808	1.201	1.520	1.749	1.889	1.785	1.626	0.864	-0.651	-0.055
313.15	0.346	0.798	1.157	1.449	1.649	1.736	1.497	1.152	0.136	-1.722	-1.417
323.15	0.389	0.815	1.137	1.386	1.526	1.498	1.160	0.635	-0.656	-2.865	-1.930
333.15	0.445	0.591	1.034	1.180	1.209	1.056	0.535	-0.196	-1.759	-3.312	-2.846
343.15	0.519	0.784	0.943	0.992	0.906	0.597	-0.081	-1.020	-2.848	-3.775	-3.030
353.15	0.603	0.803	0.876	0.826	0.613	0.166	-0.682	-1.830	-3.134	-4.038	-3.330
363.15	0.702	0.846	0.830	0.678	0.346	-0.233	-1.262	-2.630	-3.998	-4.210	<b>-4.320<sup>a</sup></b>

<sup>a</sup> Bold-face represents the maximum relative deviation

**Table S4** Relative deviation (RD in %) <sup>a</sup> of the predicted specific volumes of linear low density Poly ethylene (2) + propane (1) from the ISM EoS at several isotherms and pressures up to 7 MPa, compared with the experimental data [3].

$x_1$														
0.014			0.015			0.016			0.036			0.055		
<i>T/K</i>	<i>P/ MPa</i>	RD												
358.5	4.998	0.76	353.8	3.999	1.07	358.5	4.996	0.94	358.7	5	0.86	358.7	5.001	<b>1.64<sup>a</sup></b>
358.6	5.502	0.45	353.9	4.994	0.79	358.5	5.502	0.95	358.7	5.498	0.46	358.7	5.5	1.25
358.6	5.998	0.83	353.9	5.498	0.76	358.5	5.997	1.11	358.7	6	0.62	358.7	6.001	1.02
358.6	6.197	0.89	353.9	5.998	0.80	358.5	6.203	1.08	358.7	6.204	0.46	358.7	6.202	0.88
358.6	6.406	1.03	353.9	6.2	0.84	358.5	6.4	0.88	358.7	6.398	0.39	358.7	6.401	0.93
358.6	6.596	0.93	353.9	6.4	0.82	358.5	6.602	0.93	358.7	6.601	0.33	358.7	6.601	0.92
358.6	7	1.22	353.9	6.603	1.04	358.5	7	0.83	358.8	7	0.20	358.7	6.999	0.84
363.5	5.502	0.94	353.9	7.004	0.80	363.5	5.497	0.75	363.7	5.501	0.68	368.5	6.001	1.20
363.5	5.998	0.97	373.5	6.198	0.76	363.5	6.003	0.85	363.7	6.001	0.35	368.5	6.199	0.96
363.5	6.197	0.89	373.5	6.399	0.20	363.5	6.2	0.94	363.7	6.203	0.29	368.5	6.399	0.77
363.5	6.399	1.01	373.5	6.603	0.25	363.5	6.398	0.84	363.7	6.401	0.30	368.5	6.6	0.68
363.5	6.603	0.74	373.5	6.998	0.21	363.5	6.599	0.87	363.7	6.603	0.13	368.5	6.997	0.61
363.6	6.995	0.94	378.2	6.202	0.85	363.5	6.998	0.71	363.7	7	0.10	368.5	7.097	0.52

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368.3	6.004	1.01	378.2	6.4	0.78	368.3	5.997	1.13	368.6	5.997	0.57
368.4	6.201	0.86	378.2	6.6	0.62	368.3	6.202	1.01	368.6	6.202	0.50
368.4	6.399	0.85	378.2	6.999	0.45	368.3	6.402	0.92	368.6	6.399	0.34
368.4	6.599	0.66				368.3	6.602	1.03	368.6	6.602	0.26
368.4	7.001	1.00				368.3	6.999	0.84	368.6	6.999	0.34

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<sup>a</sup> Bold-face represents the maximum relative deviation

**Table S5** Relative deviation (in %) <sup>a</sup> of the predicted specific volumes of Poly ethylene oxide (1) + water (2) from the ISM EoS at 293.15 K and pressures up to 40 MPa, compared with the experimental data [1].

$x_1$	$P/MPa$									
0.009	0.1	-1.980	10	-2.415	20	-2.829	30	-3.237	40	-3.253
0.025	0.1	-0.346	10	-0.597	20	-1.177	30	-1.574	40	-1.966
0.041	0.1	1.095	10	0.684	20	0.278	30	-0.106	40	-0.501
0.070	0.1	2.404	10	2.002	20	1.611	30	1.230	40	0.860
0.150	0.1	0.266	10	-0.105	20	-0.442	30	-0.761	40	-1.089
0.187	0.1	-1.208	10	-1.543	20	-1.868	30	-2.183	40	-2.490
0.251	0.1	-3.551	10	-3.869	20	-4.175	30	-4.469	40	-4.758
0.291	0.1	-4.809	10	-5.167	20	-5.461	30	-5.783	40	<b>-6.028<sup>a</sup></b>

<sup>a</sup> Bold-face represents the maximum relative deviation

**Table S6** Predicted densities (in  $\text{g}\cdot\text{cm}^{-3}$ ) of PEG (1) + anisole (2) solution from the ISM EoS at several isotherms and pressures up to 50 MPa, compared with the experimental data [1].

$T/K$	$x_1$	$P/\text{MPa}$	$\rho^{\text{Exp.}}/\text{g}\cdot\text{cm}^{-3}$	$\rho^{\text{Calc.}}/\text{g}\cdot\text{cm}^{-3}$
298.15	0	0.1	0.989	0.995
298.15	0	10	0.995	1.001
298.15	0	20	1.001	1.005
298.15	0	30	1.007	1.010
298.15	0	40	1.012	1.014
298.15	0	50	1.017	1.017
318.15	0	0.1	0.969	0.974
318.15	0	10	0.977	0.981
318.15	0	20	0.984	0.988
318.15	0	30	0.990	0.994
318.15	0	40	0.995	0.999
318.15	0	50	1.001	1.004
338.15	0	0.1	0.956	0.950
338.15	0	10	0.958	0.960
338.15	0	20	0.966	0.969
338.15	0	30	0.972	0.977
338.15	0	40	0.979	0.984
338.15	0	50	0.985	0.990
298.15	0.1	0.1	1.006	1.008
298.15	0.1	10	1.012	1.013
298.15	0.1	20	1.018	1.018
298.15	0.1	30	1.024	1.022
298.15	0.1	40	1.029	1.026
298.15	0.1	50	1.034	1.030
318.15	0.1	0.1	0.988	0.986
318.15	0.1	10	0.994	0.994
318.15	0.1	20	1.001	1.000
318.15	0.1	30	1.007	1.006
318.15	0.1	40	1.012	1.011
318.15	0.1	50	1.018	1.016
338.15	0.1	0.1	0.969	0.962
338.15	0.1	10	0.977	0.972
338.15	0.1	20	0.983	0.981
338.15	0.1	30	0.989	0.989
338.15	0.1	40	0.996	0.996
338.15	0.1	50	1.002	1.002
298.15	0.2	0.1	1.024	1.021
298.15	0.2	10	1.030	1.026
298.15	0.2	20	1.036	1.031
298.15	0.2	30	1.041	1.035
298.15	0.2	40	1.046	1.039

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298.15	0.2	50	1.050	1.043
318.15	0.2	0.1	1.006	1.000
318.15	0.2	10	1.012	1.007
318.15	0.2	20	1.019	1.014
318.15	0.2	30	1.024	1.019
318.15	0.2	40	1.029	1.025
318.15	0.2	50	1.035	1.030
338.15	0.2	0.1	0.987	0.976
338.15	0.2	10	0.995	0.986
338.15	0.2	20	1.001	0.994
338.15	0.2	30	1.007	1.002
338.15	0.2	40	1.013	1.009
338.15	0.2	50	1.019	1.016
298.15	0.3	0.1	1.041	1.036
298.15	0.3	10	1.046	1.041
298.15	0.3	20	1.051	1.046
298.15	0.3	30	1.056	1.050
298.15	0.3	40	1.061	1.054
298.15	0.3	50	1.066	1.058
318.15	0.3	0.1	1.025	1.014
318.15	0.3	10	1.031	1.021
318.15	0.3	20	1.035	1.028
318.15	0.3	30	1.040	1.034
318.15	0.3	40	1.045	1.039
318.15	0.3	50	1.050	1.044
338.15	0.3	0.1	1.006	0.990
338.15	0.3	10	1.013	1.000
338.15	0.3	20	1.017	1.009
338.15	0.3	30	1.023	1.016
338.15	0.3	40	1.029	1.023
338.15	0.3	50	1.034	1.030
298.15	0.4	0.1	1.054	1.052
298.15	0.4	10	1.060	1.057
298.15	0.4	20	1.064	1.062
298.15	0.4	30	1.070	1.066
298.15	0.4	40	1.074	1.070
298.15	0.4	50	1.079	1.074
318.15	0.4	0.1	1.037	1.029
318.15	0.4	10	1.043	1.037
318.15	0.4	20	1.049	1.043
318.15	0.4	30	1.054	1.049
318.15	0.4	40	1.059	1.055
318.15	0.4	50	1.063	1.060
338.15	0.4	0.1	1.018	1.005
338.15	0.4	10	1.026	1.015
338.15	0.4	20	1.031	1.023
338.15	0.4	30	1.037	1.031

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338.15	0.4	40	1.043	1.039
338.15	0.4	50	1.048	1.045
298.15	0.5	0.1	1.067	1.068
298.15	0.5	10	1.072	1.074
298.15	0.5	20	1.077	1.078
298.15	0.5	30	1.082	1.083
298.15	0.5	40	1.086	1.087
298.15	0.5	50	1.091	1.091
318.15	0.5	0.1	1.048	1.045
318.15	0.5	10	1.055	1.053
318.15	0.5	20	1.061	1.060
318.15	0.5	30	1.066	1.066
318.15	0.5	40	1.071	1.071
318.15	0.5	50	1.075	1.077
338.15	0.5	0.1	1.033	1.020
338.15	0.5	10	1.039	1.030
338.15	0.5	20	1.043	1.039
338.15	0.5	30	1.049	1.047
338.15	0.5	40	1.054	1.054
338.15	0.5	50	1.060	1.061
298.15	0.6	0.1	1.077	1.086
298.15	0.6	10	1.083	1.091
298.15	0.6	20	1.088	1.096
298.15	0.6	30	1.093	1.101
298.15	0.6	40	1.097	1.105
298.15	0.6	50	1.102	1.110
318.15	0.6	0.1	1.061	1.061
318.15	0.6	10	1.066	1.069
318.15	0.6	20	1.071	1.076
318.15	0.6	30	1.076	1.083
318.15	0.6	40	1.081	1.089
318.15	0.6	50	1.086	1.094
338.15	0.6	0.1	1.044	1.034
338.15	0.6	10	1.050	1.045
338.15	0.6	20	1.054	1.055
338.15	0.6	30	1.059	1.063
338.15	0.6	40	1.065	1.071
338.15	0.6	50	1.071	1.078
298.15	0.8	0.1	1.101	1.119
298.15	0.8	10	1.105	1.126
298.15	0.8	20	1.110	1.132
298.15	0.8	30	1.114	1.138
298.15	0.8	40	1.119	1.144
298.15	0.8	50	1.123	1.149
318.15	0.8	0.1	1.084	1.089
318.15	0.8	10	1.089	1.099
318.15	0.8	20	1.094	1.108

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318.15	0.8	30	1.099	1.116
318.15	0.8	40	1.103	1.123
318.15	0.8	50	1.108	1.130
338.15	0.8	0.1	1.066	1.056
338.15	0.8	10	1.074	1.069
338.15	0.8	20	1.078	1.081
338.15	0.8	30	1.083	1.092
338.15	0.8	40	1.088	1.101
338.15	0.8	50	1.093	1.110
298.15	1	0.1	1.118	1.127
298.15	1	10	1.124	1.139
298.15	1	20	1.128	1.149
298.15	1	30	1.132	1.159
298.15	1	40	1.136	1.167
298.15	1	50	1.140	1.175
318.15	1	0.1	1.111	1.081
318.15	1	10	1.109	1.098
318.15	1	20	1.113	1.112
318.15	1	30	1.118	1.125
318.15	1	40	1.122	1.137
318.15	1	50	1.126	1.147
338.15	1	0.1	1.090	1.029
338.15	1	10	1.093	1.053
338.15	1	20	1.097	1.073
338.15	1	30	1.102	1.090
338.15	1	40	1.106	1.105
338.15	1	50	1.112	1.118

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**Table S7** Predicted densities (in  $\text{g}\cdot\text{cm}^{-3}$ ) of PEG (1) + 1-octanol (2) solution from the ISM EoS at several isotherms and pressures up to 30 MPa, compared with the experimental data [1].

$T/K$	$x_1$	$P/\text{MPa}$	$\rho^{\text{Exp.}}/\text{g}\cdot\text{cm}^{-3}$	$\rho^{\text{Calc.}}/\text{g}\cdot\text{cm}^{-3}$
298.15	0.270	0.1	0.853	0.860
298.15	0.270	5	0.857	0.862
298.15	0.270	10	0.860	0.863
298.15	0.270	15	0.863	0.864
298.15	0.270	20	0.866	0.866
298.15	0.270	25	0.868	0.867
298.15	0.270	30	0.871	0.868
318.15	0.270	0.1	0.839	0.846
318.15	0.270	5	0.843	0.848
318.15	0.270	10	0.846	0.850
318.15	0.270	15	0.850	0.852
318.15	0.270	20	0.853	0.854
318.15	0.270	25	0.856	0.856
318.15	0.270	30	0.859	0.857
328.15	0.270	0.1	0.832	0.838
328.15	0.270	5	0.836	0.841
328.15	0.270	10	0.839	0.843
328.15	0.270	15	0.843	0.845
328.15	0.270	20	0.846	0.847
328.15	0.270	25	0.849	0.849
328.15	0.270	30	0.852	0.851
338.15	0.270	0.1	0.825	0.830
338.15	0.270	5	0.829	0.833
338.15	0.270	10	0.832	0.836
338.15	0.270	15	0.836	0.838
338.15	0.270	20	0.839	0.841
338.15	0.270	25	0.843	0.843
338.15	0.270	30	0.846	0.845
298.15	0.454	0.1	0.885	0.893
298.15	0.454	5	0.888	0.895
298.15	0.454	10	0.891	0.896
298.15	0.454	15	0.894	0.898
298.15	0.454	20	0.897	0.899
298.15	0.454	25	0.900	0.901
298.15	0.454	30	0.902	0.902
318.15	0.454	0.1	0.871	0.876
318.15	0.454	5	0.874	0.879
318.15	0.454	10	0.877	0.881
318.15	0.454	15	0.881	0.883
318.15	0.454	20	0.884	0.885
318.15	0.454	25	0.887	0.887

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318.15	0.454	30	0.889	0.889
328.15	0.454	0.1	0.863	0.867
328.15	0.454	5	0.867	0.870
328.15	0.454	10	0.870	0.873
328.15	0.454	15	0.873	0.875
328.15	0.454	20	0.876	0.878
328.15	0.454	25	0.879	0.880
328.15	0.454	30	0.882	0.882
338.15	0.454	0.1	0.856	0.857
338.15	0.454	5	0.860	0.861
338.15	0.454	10	0.863	0.864
338.15	0.454	15	0.867	0.867
338.15	0.454	20	0.870	0.870
338.15	0.454	25	0.873	0.872
338.15	0.454	30	0.876	0.875
298.15	0.588	0.1	0.916	0.926
298.15	0.588	5	0.919	0.928
298.15	0.588	10	0.922	0.930
298.15	0.588	15	0.925	0.931
298.15	0.588	20	0.927	0.933
298.15	0.588	25	0.930	0.935
298.15	0.588	30	0.933	0.936
318.15	0.588	0.1	0.902	0.906
318.15	0.588	5	0.905	0.909
318.15	0.588	10	0.908	0.911
318.15	0.588	15	0.911	0.914
318.15	0.588	20	0.914	0.916
318.15	0.588	25	0.917	0.919
318.15	0.588	30	0.920	0.921
328.15	0.588	0.1	0.894	0.895
328.15	0.588	5	0.897	0.898
328.15	0.588	10	0.900	0.901
328.15	0.588	15	0.904	0.904
328.15	0.588	20	0.907	0.907
328.15	0.588	25	0.910	0.910
328.15	0.588	30	0.912	0.913
338.15	0.588	0.1	0.886	0.884
338.15	0.588	5	0.890	0.888
338.15	0.588	10	0.893	0.891
338.15	0.588	15	0.897	0.895
338.15	0.588	20	0.900	0.898
338.15	0.588	25	0.903	0.901
338.15	0.588	30	0.906	0.904
298.15	0.689	0.1	0.947	0.957
298.15	0.689	5	0.950	0.960
298.15	0.689	10	0.952	0.962
298.15	0.689	15	0.955	0.964

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298.15	0.689	20	0.958	0.966
298.15	0.689	25	0.960	0.968
298.15	0.689	30	0.963	0.970
318.15	0.689	0.1	0.932	0.935
318.15	0.689	5	0.935	0.938
318.15	0.689	10	0.938	0.941
318.15	0.689	15	0.941	0.944
318.15	0.689	20	0.944	0.946
318.15	0.689	25	0.947	0.949
318.15	0.689	30	0.950	0.952
328.15	0.689	0.1	0.824	0.922
328.15	0.689	5	0.827	0.926
328.15	0.689	10	0.931	0.929
328.15	0.689	15	0.934	0.933
328.15	0.689	20	0.937	0.936
328.15	0.689	25	0.939	0.939
328.15	0.689	30	0.942	0.942
338.15	0.689	0.1	0.917	0.909
338.15	0.689	5	0.920	0.913
338.15	0.689	10	0.924	0.918
338.15	0.689	15	0.927	0.922
338.15	0.689	20	0.930	0.925
338.15	0.689	25	0.933	0.929
338.15	0.689	30	0.936	0.932
298.15	0.769	0.1	0.977	0.988
298.15	0.769	5	0.979	0.991
298.15	0.769	10	0.982	0.993
298.15	0.769	15	0.985	0.996
298.15	0.769	20	0.987	0.998
298.15	0.769	25	0.990	1.000
298.15	0.769	30	0.992	1.002
318.15	0.769	0.1	0.962	0.962
318.15	0.769	5	0.965	0.966
318.15	0.769	10	0.968	0.969
318.15	0.769	15	0.971	0.973
318.15	0.769	20	0.973	0.976
318.15	0.769	25	0.976	0.979
318.15	0.769	30	0.979	0.982
328.15	0.769	0.1	0.954	0.948
328.15	0.769	5	0.957	0.952
328.15	0.769	10	0.960	0.956
328.15	0.769	15	0.963	0.960
328.15	0.769	20	0.967	0.964
328.15	0.769	25	0.969	0.968
328.15	0.769	30	0.971	0.971
338.15	0.769	0.1	0.946	0.933
338.15	0.769	5	0.950	0.938

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338.15	0.769	10	0.953	0.943
338.15	0.769	15	0.956	0.948
338.15	0.769	20	0.959	0.952
338.15	0.769	25	0.962	0.956
338.15	0.769	30	0.964	0.960
298.15	0.833	0.1	1.006	1.018
298.15	0.833	5	1.009	1.021
298.15	0.833	10	1.011	1.024
298.15	0.833	15	1.014	1.027
298.15	0.833	20	1.016	1.029
298.15	0.833	25	1.019	1.032
298.15	0.833	30	1.021	1.034
318.15	0.833	0.1	0.991	0.988
318.15	0.833	5	0.993	0.993
318.15	0.833	10	0.997	0.997
318.15	0.833	15	0.999	1.001
318.15	0.833	20	1.002	1.004
318.15	0.833	25	1.005	1.008
318.15	0.833	30	1.007	1.011
328.15	0.833	0.1	0.983	0.972
328.15	0.833	5	0.986	0.977
328.15	0.833	10	0.989	0.982
328.15	0.833	15	0.992	0.987
328.15	0.833	20	0.995	0.991
328.15	0.833	25	0.997	0.995
328.15	0.833	30	1.000	0.999
338.15	0.833	0.1	0.976	0.956
338.15	0.833	5	0.979	0.962
338.15	0.833	10	0.982	0.967
338.15	0.833	15	0.985	0.973
338.15	0.833	20	0.988	0.978
338.15	0.833	25	0.990	0.982
338.15	0.833	30	0.993	0.987
298.15	0.886	0.1	1.035	1.047
298.15	0.886	5	1.038	1.050
298.15	0.886	10	1.040	1.054
298.15	0.886	15	1.043	1.057
298.15	0.886	20	1.045	1.060
298.15	0.886	25	1.047	1.063
298.15	0.886	30	1.049	1.066
318.15	0.886	0.1	1.020	1.014
318.15	0.886	5	1.023	1.019
318.15	0.886	10	1.025	1.024
318.15	0.886	15	1.028	1.028
318.15	0.886	20	1.030	1.032
318.15	0.886	25	1.033	1.037
318.15	0.886	30	1.035	1.040

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328.15	0.886	0.1	1.012	0.996
328.15	0.886	5	1.015	1.002
328.15	0.886	10	1.018	1.007
328.15	0.886	15	1.020	1.013
328.15	0.886	20	1.023	1.018
328.15	0.886	25	1.025	1.023
328.15	0.886	30	1.028	1.027
338.15	0.886	0.1	1.004	0.977
338.15	0.886	5	1.007	0.984
338.15	0.886	10	1.010	0.991
338.15	0.886	15	1.013	0.997
338.15	0.886	20	1.016	1.003
338.15	0.886	25	1.018	1.008
338.15	0.886	30	1.021	1.014
298.15	0.930	0.1	1.063	1.075
298.15	0.930	5	1.066	1.079
298.15	0.930	10	1.068	1.083
298.15	0.930	15	1.071	1.087
298.15	0.930	20	1.073	1.090
298.15	0.930	25	1.075	1.094
298.15	0.930	30	1.077	1.097
318.15	0.930	0.1	1.048	1.038
318.15	0.930	5	1.051	1.044
318.15	0.930	10	1.053	1.049
318.15	0.930	15	1.056	1.055
318.15	0.930	20	1.058	1.060
318.15	0.930	25	1.061	1.064
318.15	0.930	30	1.063	1.069
328.15	0.930	0.1	1.040	1.018
328.15	0.930	5	1.043	1.025
328.15	0.930	10	1.045	1.031
328.15	0.930	15	1.048	1.038
328.15	0.930	20	1.051	1.044
328.15	0.930	25	1.053	1.049
328.15	0.930	30	1.055	1.054
338.15	0.930	0.1	1.032	0.997
338.15	0.930	5	1.035	1.005
338.15	0.930	10	1.038	1.013
338.15	0.930	15	1.041	1.020
338.15	0.930	20	1.043	1.027
338.15	0.930	25	1.046	1.033
338.15	0.930	30	1.048	1.039
298.15	0.968	0.1	1.092	1.102
298.15	0.968	5	1.094	1.106
298.15	0.968	10	1.096	1.111
298.15	0.968	15	1.099	1.116
298.15	0.968	20	1.101	1.120

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298.15	0.968	25	1.103	1.124
298.15	0.968	30	1.105	1.128
318.15	0.968	0.1	1.076	1.060
318.15	0.968	5	1.079	1.067
318.15	0.968	10	1.081	1.074
318.15	0.968	15	1.083	1.080
318.15	0.968	20	1.086	1.086
318.15	0.968	25	1.088	1.092
318.15	0.968	30	1.090	1.097
328.15	0.968	0.1	1.068	1.038
328.15	0.968	5	1.071	1.046
328.15	0.968	10	1.073	1.054
328.15	0.968	15	1.076	1.062
328.15	0.968	20	1.078	1.069
328.15	0.968	25	1.080	1.075
328.15	0.968	30	1.083	1.081
338.15	0.968	0.1	1.060	1.014
338.15	0.968	5	1.063	1.024
338.15	0.968	10	1.066	1.034
338.15	0.968	15	1.068	1.042
338.15	0.968	20	1.071	1.051
338.15	0.968	25	1.073	1.058
338.15	0.968	30	1.076	1.065

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**Table S8** Predicted densities (in  $\text{g}\cdot\text{cm}^{-3}$ ) of PPG (1) + anisole (2) solution from the ISM EoS at several isotherms and pressures up to 50 MPa, compared with the experimental data [1].

$T/K$	$x_1$	$P/\text{MPa}$	$\rho^{\text{Exp.}}/\text{g}\cdot\text{cm}^{-3}$	$\rho^{\text{Calc.}}/\text{g}\cdot\text{cm}^{-3}$
298.15	0.0	0.1	0.9887	0.9955
298.15	0.0	10	0.9951	1.0006
298.15	0.0	15	0.9981	1.0029
298.15	0.0	20	1.0011	1.0052
298.15	0.0	25	1.0040	1.0074
298.15	0.0	30	1.0068	1.0095
298.15	0.0	35	1.0095	1.0116
298.15	0.0	40	1.0120	1.0135
298.15	0.0	45	1.0147	1.0154
298.15	0.0	50	1.0173	1.0172
318.15	0.0	0.1	0.9700	0.9739
318.15	0.0	10	0.9770	0.9812
318.15	0.0	15	0.9803	0.9846
318.15	0.0	20	0.9836	0.9878
318.15	0.0	25	0.9869	0.9908
318.15	0.0	30	0.9899	0.9937
318.15	0.0	35	0.9929	0.9965
318.15	0.0	40	0.9958	0.9991
318.15	0.0	45	0.9987	1.0016
318.15	0.0	50	1.0014	1.0040
348.15	0.0	0.1	0.9409	0.9369
348.15	0.0	10	0.9493	0.9486
348.15	0.0	15	0.9533	0.9539
348.15	0.0	20	0.9571	0.9589
348.15	0.0	25	0.9607	0.9635
348.15	0.0	30	0.9643	0.9678
348.15	0.0	35	0.9677	0.9719
348.15	0.0	40	0.9711	0.9758
348.15	0.0	45	0.9743	0.9794
348.15	0.0	50	0.9774	0.9829
298.15	0.1	0.1	0.9917	0.9970
298.15	0.1	10	0.9981	1.0019
298.15	0.1	15	1.0012	1.0043
298.15	0.1	20	1.0042	1.0065
298.15	0.1	25	1.0070	1.0086
298.15	0.1	30	1.0099	1.0107
298.15	0.1	35	1.0128	1.0127
298.15	0.1	40	1.0153	1.0146
298.15	0.1	45	1.0179	1.0164
298.15	0.1	50	1.0205	1.0182
318.15	0.1	0.1	0.9736	0.9753

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318.15	0.1	10	0.9805	0.9824
318.15	0.1	15	0.9839	0.9857
318.15	0.1	20	0.9873	0.9888
318.15	0.1	25	0.9903	0.9918
318.15	0.1	30	0.9934	0.9946
318.15	0.1	35	0.9963	0.9973
318.15	0.1	40	0.9992	0.9999
318.15	0.1	45	1.0020	1.0023
318.15	0.1	50	1.0046	1.0047
348.15	0.1	0.1	0.9460	0.9380
348.15	0.1	10	0.9542	0.9494
348.15	0.1	15	0.9581	0.9546
348.15	0.1	20	0.9618	0.9594
348.15	0.1	25	0.9653	0.9640
348.15	0.1	30	0.9688	0.9682
348.15	0.1	35	0.9721	0.9722
348.15	0.1	40	0.9754	0.9760
348.15	0.1	45	0.9786	0.9796
348.15	0.1	50	0.9816	0.9831
298.15	0.2	0.1	0.9953	0.9988
298.15	0.2	10	1.0015	1.0035
298.15	0.2	15	1.0046	1.0058
298.15	0.2	20	1.0075	1.0080
298.15	0.2	25	1.0102	1.0101
298.15	0.2	30	1.0131	1.0121
298.15	0.2	35	1.0158	1.0140
298.15	0.2	40	1.0183	1.0158
298.15	0.2	45	1.0208	1.0176
298.15	0.2	50	1.0234	1.0194
318.15	0.2	0.1	0.9779	0.9769
318.15	0.2	10	0.9847	0.9838
318.15	0.2	15	0.9880	0.9870
318.15	0.2	20	0.9912	0.9900
318.15	0.2	25	0.9943	0.9929
318.15	0.2	30	0.9973	0.9957
318.15	0.2	35	1.0002	0.9983
318.15	0.2	40	1.0030	1.0009
318.15	0.2	45	1.0058	1.0033
318.15	0.2	50	1.0085	1.0056
348.15	0.2	0.1	0.9511	0.9393
348.15	0.2	10	0.9591	0.9505
348.15	0.2	15	0.9630	0.9555
348.15	0.2	20	0.9667	0.9603
348.15	0.2	25	0.9701	0.9647
348.15	0.2	30	0.9736	0.9689
348.15	0.2	35	0.9769	0.9728
348.15	0.2	40	0.9801	0.9765

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348.15	0.2	45	0.9832	0.9801
348.15	0.2	50	0.9862	0.9835
298.15	0.3	0.1	0.9982	1.0008
298.15	0.3	10	1.0044	1.0054
298.15	0.3	15	1.0074	1.0076
298.15	0.3	20	1.0103	1.0097
298.15	0.3	25	1.0130	1.0118
298.15	0.3	30	1.0158	1.0137
298.15	0.3	35	1.0185	1.0156
298.15	0.3	40	1.0210	1.0174
298.15	0.3	45	1.0236	1.0192
298.15	0.3	50	1.0261	1.0209
318.15	0.3	0.1	0.9810	0.9789
318.15	0.3	10	0.9877	0.9855
318.15	0.3	15	0.9910	0.9886
318.15	0.3	20	0.9942	0.9916
318.15	0.3	25	0.9972	0.9944
318.15	0.3	30	1.0002	0.9971
318.15	0.3	35	1.0030	0.9997
318.15	0.3	40	1.0059	1.0022
318.15	0.3	45	1.0086	1.0046
318.15	0.3	50	1.0113	1.0068
348.15	0.3	0.1	0.9547	0.9411
348.15	0.3	10	0.9627	0.9519
348.15	0.3	15	0.9664	0.9568
348.15	0.3	20	0.9701	0.9614
348.15	0.3	25	0.9735	0.9657
348.15	0.3	30	0.9769	0.9698
348.15	0.3	35	0.9802	0.9737
348.15	0.3	40	0.9834	0.9774
348.15	0.3	45	0.9864	0.9809
348.15	0.3	50	0.9894	0.9842
298.15	0.4	0.1	0.9997	1.0032
298.15	0.4	10	1.0058	1.0077
298.15	0.4	15	1.0088	1.0098
298.15	0.4	20	1.0117	1.0119
298.15	0.4	25	1.0145	1.0138
298.15	0.4	30	1.0172	1.0157
298.15	0.4	35	1.0199	1.0175
298.15	0.4	40	1.0224	1.0193
298.15	0.4	45	1.0250	1.0210
298.15	0.4	50	1.0275	1.0227
318.15	0.4	0.1	0.9829	0.9812
318.15	0.4	10	0.9895	0.9877
318.15	0.4	15	0.9929	0.9907
318.15	0.4	20	0.9960	0.9935
318.15	0.4	25	0.9991	0.9963

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318.15	0.4	30	1.0020	0.9989
318.15	0.4	35	1.0049	1.0014
318.15	0.4	40	1.0077	1.0038
318.15	0.4	45	1.0103	1.0062
318.15	0.4	50	1.0130	1.0084
348.15	0.4	0.1	0.9571	0.9432
348.15	0.4	10	0.9649	0.9537
348.15	0.4	15	0.9686	0.9585
348.15	0.4	20	0.9722	0.9630
348.15	0.4	25	0.9757	0.9672
348.15	0.4	30	0.9790	0.9712
348.15	0.4	35	0.9822	0.9750
348.15	0.4	40	0.9855	0.9786
348.15	0.4	45	0.9885	0.9820
348.15	0.4	50	0.9914	0.9853
298.15	0.5	0.1	1.0007	1.0061
298.15	0.5	10	1.0069	1.0104
298.15	0.5	15	1.0099	1.0124
298.15	0.5	20	1.0127	1.0144
298.15	0.5	25	1.0155	1.0163
298.15	0.5	30	1.0182	1.0181
298.15	0.5	35	1.0209	1.0199
298.15	0.5	40	1.0234	1.0216
298.15	0.5	45	1.0260	1.0233
298.15	0.5	50	1.0284	1.0249
318.15	0.5	0.1	0.9842	0.9840
318.15	0.5	10	0.9908	0.9902
318.15	0.5	15	0.9941	0.9932
318.15	0.5	20	0.9972	0.9959
318.15	0.5	25	1.0003	0.9986
318.15	0.5	30	1.0032	1.0012
318.15	0.5	35	1.0060	1.0036
318.15	0.5	40	1.0089	1.0060
318.15	0.5	45	1.0115	1.0082
318.15	0.5	50	1.0142	1.0104
348.15	0.5	0.1	0.9587	0.9459
348.15	0.5	10	0.9666	0.9560
348.15	0.5	15	0.9703	0.9607
348.15	0.5	20	0.9738	0.9651
348.15	0.5	25	0.9772	0.9692
348.15	0.5	30	0.9806	0.9731
348.15	0.5	35	0.9838	0.9768
348.15	0.5	40	0.9870	0.9803
348.15	0.5	45	0.9900	0.9837
348.15	0.5	50	0.9930	0.9869
298.15	0.6	0.1	1.0014	1.0094
298.15	0.6	10	1.0075	1.0136

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298.15	0.6	15	1.0105	1.0155
298.15	0.6	20	1.0134	1.0174
298.15	0.6	25	1.0161	1.0193
298.15	0.6	30	1.0188	1.0211
298.15	0.6	35	1.0215	1.0228
298.15	0.6	40	1.0240	1.0244
298.15	0.6	45	1.0265	1.0261
298.15	0.6	50	1.0290	1.0276
318.15	0.6	0.1	0.9850	0.9874
318.15	0.6	10	0.9917	0.9934
318.15	0.6	15	0.9950	0.9962
318.15	0.6	20	0.9981	0.9989
318.15	0.6	25	1.0011	1.0015
318.15	0.6	30	1.0040	1.0040
318.15	0.6	35	1.0069	1.0063
318.15	0.6	40	1.0096	1.0086
318.15	0.6	45	1.0122	1.0108
318.15	0.6	50	1.0149	1.0130
348.15	0.6	0.1	0.9600	0.9492
348.15	0.6	10	0.9677	0.9590
348.15	0.6	15	0.9714	0.9635
348.15	0.6	20	0.9749	0.9678
348.15	0.6	25	0.9784	0.9718
348.15	0.6	30	0.9817	0.9756
348.15	0.6	35	0.9848	0.9792
348.15	0.6	40	0.9880	0.9827
348.15	0.6	45	0.9910	0.9860
348.15	0.6	50	0.9939	0.9891
298.15	0.7	0.1	1.0019	1.0135
298.15	0.7	10	1.0080	1.0174
298.15	0.7	15	1.0109	1.0193
298.15	0.7	20	1.0138	1.0211
298.15	0.7	25	1.0165	1.0229
298.15	0.7	30	1.0193	1.0246
298.15	0.7	35	1.0220	1.0263
298.15	0.7	40	1.0245	1.0279
298.15	0.7	45	1.0270	1.0294
298.15	0.7	50	1.0294	1.0310
318.15	0.7	0.1	0.9857	0.9915
318.15	0.7	10	0.9923	0.9973
318.15	0.7	15	0.9956	1.0000
318.15	0.7	20	0.9987	1.0026
318.15	0.7	25	1.0017	1.0051
318.15	0.7	30	1.0046	1.0075
318.15	0.7	35	1.0074	1.0098
318.15	0.7	40	1.0102	1.0120
318.15	0.7	45	1.0128	1.0141

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318.15	0.7	50	1.0155	1.0162
348.15	0.7	0.1	0.9609	0.9534
348.15	0.7	10	0.9687	0.9628
348.15	0.7	15	0.9723	0.9672
348.15	0.7	20	0.9759	0.9713
348.15	0.7	25	0.9792	0.9752
348.15	0.7	30	0.9825	0.9789
348.15	0.7	35	0.9857	0.9824
348.15	0.7	40	0.9889	0.9858
348.15	0.7	45	0.9918	0.9890
348.15	0.7	50	0.9947	0.9920
298.15	0.8	0.1	1.0024	1.0183
298.15	0.8	10	1.0084	1.0221
298.15	0.8	15	1.0114	1.0239
298.15	0.8	20	1.0142	1.0257
298.15	0.8	25	1.0169	1.0273
298.15	0.8	30	1.0197	1.0290
298.15	0.8	35	1.0224	1.0306
298.15	0.8	40	1.0248	1.0321
298.15	0.8	45	1.0274	1.0336
298.15	0.8	50	1.0298	1.0351
318.15	0.8	0.1	0.9863	0.9966
318.15	0.8	10	0.9929	1.0021
318.15	0.8	15	0.9961	1.0047
318.15	0.8	20	0.9993	1.0072
318.15	0.8	25	1.0022	1.0096
318.15	0.8	30	1.0051	1.0119
318.15	0.8	35	1.0079	1.0141
318.15	0.8	40	1.0107	1.0162
318.15	0.8	45	1.0133	1.0183
318.15	0.8	50	1.0159	1.0203
348.15	0.8	0.1	0.9617	0.9586
348.15	0.8	10	0.9694	0.9677
348.15	0.8	15	0.9731	0.9719
348.15	0.8	20	0.9766	0.9759
348.15	0.8	25	0.9799	0.9796
348.15	0.8	30	0.9833	0.9832
348.15	0.8	35	0.9863	0.9866
348.15	0.8	40	0.9895	0.9899
348.15	0.8	45	0.9925	0.9930
348.15	0.8	50	0.9953	0.9960
298.15	0.9	0.1	1.0028	1.0242
298.15	0.9	10	1.0088	1.0278
298.15	0.9	15	1.0117	1.0295
298.15	0.9	20	1.0146	1.0312
298.15	0.9	25	1.0173	1.0328
298.15	0.9	30	1.0200	1.0344

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298.15	0.9	35	1.0227	1.0359
298.15	0.9	40	1.0251	1.0374
298.15	0.9	45	1.0277	1.0388
298.15	0.9	50	1.0301	1.0402
318.15	0.9	0.1	0.9868	1.0028
318.15	0.9	10	0.9934	1.0080
318.15	0.9	15	0.9966	1.0105
318.15	0.9	20	0.9997	1.0129
318.15	0.9	25	1.0027	1.0152
318.15	0.9	30	1.0055	1.0174
318.15	0.9	35	1.0084	1.0195
318.15	0.9	40	1.0112	1.0216
318.15	0.9	45	1.0137	1.0235
318.15	0.9	50	1.0164	1.0255
348.15	0.9	0.1	0.9624	0.9653
348.15	0.9	10	0.9701	0.9740
348.15	0.9	15	0.9737	0.9780
348.15	0.9	20	0.9772	0.9818
348.15	0.9	25	0.9806	0.9854
348.15	0.9	30	0.9838	0.9888
348.15	0.9	35	0.9869	0.9921
348.15	0.9	40	0.9901	0.9952
348.15	0.9	45	0.9931	0.9982
348.15	0.9	50	0.9959	1.0011
298.15	1	0.1	1.0031	1.0315
298.15	1	10	1.0091	1.0348
298.15	1	15	1.0120	1.0365
298.15	1	20	1.0149	1.0380
298.15	1	25	1.0176	1.0396
298.15	1	30	1.0203	1.0410
298.15	1	35	1.0230	1.0425
298.15	1	40	1.0254	1.0439
298.15	1	45	1.0280	1.0452
298.15	1	50	1.0304	1.0466
318.15	1	0.1	0.9872	1.0106
318.15	1	10	0.9938	1.0155
318.15	1	15	0.9970	1.0179
318.15	1	20	1.0001	1.0201
318.15	1	25	1.0031	1.0223
318.15	1	30	1.0059	1.0244
318.15	1	35	1.0088	1.0264
318.15	1	40	1.0116	1.0284
318.15	1	45	1.0141	1.0302
318.15	1	50	1.0167	1.0321
348.15	1	0.1	0.9630	0.9738
348.15	1	10	0.9707	0.9820
348.15	1	15	0.9743	0.9858

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348.15	1	20	0.9778	0.9894
348.15	1	25	0.9811	0.9929
348.15	1	30	0.9844	0.9962
348.15	1	35	0.9875	0.9993
348.15	1	40	0.9906	1.0023
348.15	1	45	0.9936	1.0052
348.15	1	50	0.9964	1.0079

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**Table S9** Predicted densities (in  $\text{g}\cdot\text{cm}^{-3}$ ) of PPG (1) +1-octanol (2) solution from the ISM EoS at several isotherms and pressures up to 50 MPa, compared with the experimental data [1].

$T/K$	$x_1$	$P/\text{MPa}$	$\rho^{\text{Exp.}}/\text{g}\cdot\text{cm}^{-3}$	$\rho^{\text{Calc.}}/\text{g}\cdot\text{cm}^{-3}$
298.15	0.000	0.1	0.8216	0.8262
298.15	0.000	10	0.8278	0.8286
298.15	0.000	15	0.8308	0.8297
298.15	0.000	20	0.8337	0.8308
298.15	0.000	25	0.8364	0.8318
298.15	0.000	30	0.8391	0.8329
298.15	0.000	35	0.8417	0.8338
298.15	0.000	40	0.8442	0.8348
298.15	0.000	45	0.8467	0.8357
298.15	0.000	50	0.8491	0.8366
318.15	0.000	0.1	0.8077	0.8148
318.15	0.000	10	0.8149	0.8183
318.15	0.000	15	0.8182	0.8199
318.15	0.000	20	0.8213	0.8215
318.15	0.000	25	0.8243	0.8230
318.15	0.000	30	0.8272	0.8244
318.15	0.000	35	0.8300	0.8258
318.15	0.000	40	0.8327	0.8271
318.15	0.000	45	0.8354	0.8284
318.15	0.000	50	0.8380	0.8296
348.15	0.000	0.1	0.7855	0.7942
348.15	0.000	10	0.7933	0.7999
348.15	0.000	15	0.7969	0.8025
348.15	0.000	20	0.8005	0.8050
348.15	0.000	25	0.8039	0.8073
348.15	0.000	30	0.8072	0.8096
348.15	0.000	35	0.8104	0.8117
348.15	0.000	40	0.8135	0.8137
348.15	0.000	45	0.8164	0.8157
348.15	0.000	50	0.8193	0.8175
298.15	0.829	0.1	0.9534	0.9445
298.15	0.829	10	0.9596	0.9480
298.15	0.829	15	0.9626	0.9496
298.15	0.829	20	0.9654	0.9513
298.15	0.829	25	0.9682	0.9528
298.15	0.829	30	0.9709	0.9544
298.15	0.829	35	0.9736	0.9558
298.15	0.829	40	0.9762	0.9573
298.15	0.829	45	0.9787	0.9587
298.15	0.829	50	0.9812	0.9600

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318.15	0.829	0.1	0.9381	0.9225
318.15	0.829	10	0.9448	0.9276
318.15	0.829	15	0.9481	0.9300
318.15	0.829	20	0.9513	0.9323
318.15	0.829	25	0.9543	0.9345
318.15	0.829	30	0.9572	0.9367
318.15	0.829	35	0.9601	0.9387
318.15	0.829	40	0.9628	0.9407
318.15	0.829	45	0.9655	0.9427
318.15	0.829	50	0.9681	0.9446
348.15	0.829	0.1	0.9149	0.8845
348.15	0.829	10	0.9226	0.8930
348.15	0.829	15	0.9263	0.8969
348.15	0.829	20	0.9298	0.9006
348.15	0.829	25	0.9332	0.9041
348.15	0.829	30	0.9365	0.9074
348.15	0.829	35	0.9397	0.9106
348.15	0.829	40	0.9428	0.9137
348.15	0.829	45	0.9458	0.9166
348.15	0.829	50	0.9486	0.9194
298.15	0.931	0.1	0.9745	0.9884
298.15	0.931	10	0.9807	0.9919
298.15	0.931	15	0.9837	0.9936
298.15	0.931	20	0.9865	0.9952
298.15	0.931	25	0.9893	0.9968
298.15	0.931	30	0.9921	0.9983
298.15	0.931	35	0.9947	0.9998
298.15	0.931	40	0.9973	1.0013
298.15	0.931	45	0.9998	1.0027
298.15	0.931	50	1.0023	1.0041
318.15	0.931	0.1	0.9593	0.9662
318.15	0.931	10	0.9659	0.9714
318.15	0.931	15	0.9692	0.9738
318.15	0.931	20	0.9724	0.9761
318.15	0.931	25	0.9755	0.9784
318.15	0.931	30	0.9785	0.9806
318.15	0.931	35	0.9813	0.9826
318.15	0.931	40	0.9841	0.9847
318.15	0.931	45	0.9869	0.9866
318.15	0.931	50	0.9895	0.9885
348.15	0.931	0.1	0.9362	0.9277
348.15	0.931	10	0.9439	0.9362
348.15	0.931	15	0.9476	0.9402
348.15	0.931	20	0.9513	0.9439
348.15	0.931	25	0.9548	0.9475
348.15	0.931	30	0.9580	0.9509
348.15	0.931	35	0.9612	0.9541

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348.15	0.931	40	0.9644	0.9572
348.15	0.931	45	0.9673	0.9602
348.15	0.931	50	0.9703	0.9631
298.15	0.959	0.1	0.9830	1.0038
298.15	0.959	10	0.9893	1.0073
298.15	0.959	15	0.9923	1.0090
298.15	0.959	20	0.9952	1.0106
298.15	0.959	25	0.9980	1.0122
298.15	0.959	30	1.0007	1.0137
298.15	0.959	35	1.0034	1.0152
298.15	0.959	40	1.0060	1.0166
298.15	0.959	45	1.0085	1.0180
298.15	0.959	50	1.0110	1.0194
318.15	0.959	0.1	0.9680	0.9820
318.15	0.959	10	0.9748	0.9871
318.15	0.959	15	0.9780	0.9895
318.15	0.959	20	0.9812	0.9918
318.15	0.959	25	0.9842	0.9941
318.15	0.959	30	0.9871	0.9962
318.15	0.959	35	0.9900	0.9983
318.15	0.959	40	0.9928	1.0003
318.15	0.959	45	0.9955	1.0022
318.15	0.959	50	0.9982	1.0041
348.15	0.959	0.1	0.9451	0.9439
348.15	0.959	10	0.9529	0.9523
348.15	0.959	15	0.9566	0.9562
348.15	0.959	20	0.9601	0.9600
348.15	0.959	25	0.9636	0.9635
348.15	0.959	30	0.9668	0.9669
348.15	0.959	35	0.9700	0.9701
348.15	0.959	40	0.9731	0.9732
348.15	0.959	45	0.9761	0.9761
348.15	0.959	50	0.9790	0.9789
298.15	0.973	0.1	0.9876	1.0128
298.15	0.973	10	0.9938	1.0162
298.15	0.973	15	0.9969	1.0179
298.15	0.973	20	0.9998	1.0195
298.15	0.973	25	1.0025	1.0210
298.15	0.973	30	1.0053	1.0226
298.15	0.973	35	1.0080	1.0240
298.15	0.973	40	1.0105	1.0255
298.15	0.973	45	1.0131	1.0268
298.15	0.973	50	1.0155	1.0282
318.15	0.973	0.1	0.9724	0.9912
318.15	0.973	10	0.9792	0.9962
318.15	0.973	15	0.9823	0.9986
318.15	0.973	20	0.9856	1.0009

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318.15	0.973	25	0.9885	1.0031
318.15	0.973	30	0.9914	1.0053
318.15	0.973	35	0.9943	1.0073
318.15	0.973	40	0.9973	1.0093
318.15	0.973	45	0.9998	1.0113
318.15	0.973	50	1.0025	1.0131
348.15	0.973	0.1	0.9496	0.9534
348.15	0.973	10	0.9572	0.9618
348.15	0.973	15	0.9609	0.9657
348.15	0.973	20	0.9645	0.9694
348.15	0.973	25	0.9679	0.9729
348.15	0.973	30	0.9711	0.9762
348.15	0.973	35	0.9743	0.9794
348.15	0.973	40	0.9775	0.9825
348.15	0.973	45	0.9804	0.9854
348.15	0.973	50	0.9833	0.9882
298.15	0.988	0.1	0.9928	1.0227
298.15	0.988	10	0.9990	1.0261
298.15	0.988	15	1.0021	1.0278
298.15	0.988	20	1.0050	1.0294
298.15	0.988	25	1.0077	1.0309
298.15	0.988	30	1.0104	1.0324
298.15	0.988	35	1.0132	1.0339
298.15	0.988	40	1.0158	1.0353
298.15	0.988	45	1.0183	1.0366
298.15	0.988	50	1.0208	1.0380
318.15	0.988	0.1	0.9776	1.0015
318.15	0.988	10	0.9844	1.0065
318.15	0.988	15	0.9877	1.0088
318.15	0.988	20	0.9909	1.0111
318.15	0.988	25	0.9940	1.0133
318.15	0.988	30	0.9969	1.0154
318.15	0.988	35	0.9998	1.0175
318.15	0.988	40	1.0024	1.0194
318.15	0.988	45	1.0053	1.0214
318.15	0.988	50	1.0080	1.0232
348.15	0.988	0.1	0.9547	0.9642
348.15	0.988	10	0.9624	0.9725
348.15	0.988	15	0.9661	0.9763
348.15	0.988	20	0.9697	0.9800
348.15	0.988	25	0.9731	0.9835
348.15	0.988	30	0.9764	0.9868
348.15	0.988	35	0.9795	0.9899
348.15	0.988	40	0.9826	0.9930
348.15	0.988	45	0.9856	0.9959
348.15	0.988	50	0.9886	0.9987
298.15	0.992	0.1	0.9945	1.0257

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298.15	0.992	10	1.0006	1.0291
298.15	0.992	15	1.0036	1.0308
298.15	0.992	20	1.0065	1.0323
298.15	0.992	25	1.0093	1.0339
298.15	0.992	30	1.0121	1.0354
298.15	0.992	35	1.0147	1.0368
298.15	0.992	40	1.0173	1.0382
298.15	0.992	45	1.0198	1.0396
298.15	0.992	50	1.0223	1.0409
318.15	0.992	0.1	0.9792	1.0046
318.15	0.992	10	0.9861	1.0096
318.15	0.992	15	0.9895	1.0119
318.15	0.992	20	0.9925	1.0142
318.15	0.992	25	0.9955	1.0164
318.15	0.992	30	0.9985	1.0185
318.15	0.992	35	1.0014	1.0205
318.15	0.992	40	1.0042	1.0225
318.15	0.992	45	1.0069	1.0244
318.15	0.992	50	1.0095	1.0263
348.15	0.992	0.1	0.9563	0.9675
348.15	0.992	10	0.9640	0.9757
348.15	0.992	15	0.9677	0.9796
348.15	0.992	20	0.9712	0.9832
348.15	0.992	25	0.9746	0.9867
348.15	0.992	30	0.9779	0.9900
348.15	0.992	35	0.9811	0.9931
348.15	0.992	40	0.9842	0.9962
348.15	0.992	45	0.9872	0.9991
348.15	0.992	50	0.9901	1.0018
298.15	0.995	0.1	0.9958	1.0281
298.15	0.995	10	1.0021	1.0315
298.15	0.995	15	1.0050	1.0331
298.15	0.995	20	1.0079	1.0347
298.15	0.995	25	1.0107	1.0362
298.15	0.995	30	1.0134	1.0377
298.15	0.995	35	1.0161	1.0391
298.15	0.995	40	1.0187	1.0405
298.15	0.995	45	1.0213	1.0419
298.15	0.995	50	1.0237	1.0432
318.15	0.995	0.1	0.9805	1.0071
318.15	0.995	10	0.9873	1.0120
318.15	0.995	15	0.9906	1.0144
318.15	0.995	20	0.9936	1.0166
318.15	0.995	25	0.9967	1.0188
318.15	0.995	30	0.9996	1.0209
318.15	0.995	35	1.0025	1.0229
318.15	0.995	40	1.0053	1.0249

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318.15	0.995	45	1.0080	1.0268
318.15	0.995	50	1.0107	1.0286
348.15	0.995	0.1	0.9576	0.9701
348.15	0.995	10	0.9653	0.9783
348.15	0.995	15	0.9689	0.9821
348.15	0.995	20	0.9724	0.9858
348.15	0.995	25	0.9758	0.9892
348.15	0.995	30	0.9791	0.9925
348.15	0.995	35	0.9824	0.9957
348.15	0.995	40	0.9854	0.9987
348.15	0.995	45	0.9885	1.0015
348.15	0.995	50	0.9914	1.0043
298.15	1.000	0.1	0.9979	1.0315
298.15	1.000	10	1.0042	1.0348
298.15	1.000	15	1.0071	1.0365
298.15	1.000	20	1.0100	1.0380
298.15	1.000	25	1.0128	1.0396
298.15	1.000	30	1.0156	1.0410
298.15	1.000	35	1.0182	1.0425
298.15	1.000	40	1.0208	1.0439
298.15	1.000	45	1.0233	1.0452
298.15	1.000	50	1.0258	1.0466
318.15	1.000	0.1	0.9828	1.0106
318.15	1.000	10	0.9896	1.0155
318.15	1.000	15	0.9928	1.0179
318.15	1.000	20	0.9959	1.0201
318.15	1.000	25	0.9990	1.0223
318.15	1.000	30	1.0019	1.0244
318.15	1.000	35	1.0048	1.0264
318.15	1.000	40	1.0076	1.0284
318.15	1.000	45	1.0103	1.0302
318.15	1.000	50	1.0130	1.0321
348.15	1.000	0.1	0.9600	0.9738
348.15	1.000	10	0.9675	0.9820
348.15	1.000	15	0.9712	0.9858
348.15	1.000	20	0.9747	0.9894
348.15	1.000	25	0.9781	0.9929
348.15	1.000	30	0.9814	0.9962
348.15	1.000	35	0.9846	0.9993
348.15	1.000	40	0.9877	1.0023
348.15	1.000	45	0.9907	1.0052
348.15	1.000	50	0.9936	1.0079

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