

## Thermodynamics of Ethanol + Water + 2-Propanol Mixture at the Range of Temperature 288.15-323.15 K

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Received 05 April 2017, Revised 13 March 2018, Accepted 15 March 2018

*Supplementary Table 1. Ultrasonic velocities, isentropic compressibilities and change of isentropic compressibilities for ternary mixture at range of 288.15 – 323.15 K.*

$x_1$	$x_2$	$\rho$ /(g·cm <sup>-3</sup> )	$u$ /(m·s <sup>-1</sup> )	$\kappa_s$ /(TPa <sup>-1</sup> )	$\delta\kappa_s$ /(TPa <sup>-1</sup> )	$\delta V^E$ (cm <sup>3</sup> ·mol <sup>-1</sup> )	$x_1$	$x_2$	$\rho$ /(g·cm <sup>-3</sup> )	$u$ /(m·s <sup>-1</sup> )	$\kappa_s$ /(TPa <sup>-1</sup> )	$\delta\kappa_s$ /(TPa <sup>-1</sup> )	$\delta V^E$ (cm <sup>3</sup> ·mol <sup>-1</sup> )
288.15 K													
0.0511	0.0511	0.0511	0.0511	0.0511	0.0511	0.0511	0.0511	0.0511	0.0511	0.0511	0.0511	0.0511	0.0511
0.0576	0.0576	0.0576	0.0576	0.0576	0.0576	0.0576	0.0576	0.0576	0.0576	0.0576	0.0576	0.0576	0.0576
0.1494	0.1494	0.1494	0.1494	0.1494	0.1494	0.1494	0.1494	0.1494	0.1494	0.1494	0.1494	0.1494	0.1494
0.0610	0.0610	0.0610	0.0610	0.0610	0.0610	0.0610	0.0610	0.0610	0.0610	0.0610	0.0610	0.0610	0.0610
0.1601	0.1601	0.1601	0.1601	0.1601	0.1601	0.1601	0.1601	0.1601	0.1601	0.1601	0.1601	0.1601	0.1601
0.2573	0.2573	0.2573	0.2573	0.2573	0.2573	0.2573	0.2573	0.2573	0.2573	0.2573	0.2573	0.2573	0.2573
0.0605	0.0605	0.0605	0.0605	0.0605	0.0605	0.0605	0.0605	0.0605	0.0605	0.0605	0.0605	0.0605	0.0605
0.1632	0.1632	0.1632	0.1632	0.1632	0.1632	0.1632	0.1632	0.1632	0.1632	0.1632	0.1632	0.1632	0.1632
0.2713	0.2713	0.2713	0.2713	0.2713	0.2713	0.2713	0.2713	0.2713	0.2713	0.2713	0.2713	0.2713	0.2713
0.3579	0.3579	0.3579	0.3579	0.3579	0.3579	0.3579	0.3579	0.3579	0.3579	0.3579	0.3579	0.3579	0.3579
0.0616	0.0616	0.0616	0.0616	0.0616	0.0616	0.0616	0.0616	0.0616	0.0616	0.0616	0.0616	0.0616	0.0616
0.1721	0.1721	0.1721	0.1721	0.1721	0.1721	0.1721	0.1721	0.1721	0.1721	0.1721	0.1721	0.1721	0.1721
0.2842	0.2842	0.2842	0.2842	0.2842	0.2842	0.2842	0.2842	0.2842	0.2842	0.2842	0.2842	0.2842	0.2842
0.3765	0.3765	0.3765	0.3765	0.3765	0.3765	0.3765	0.3765	0.3765	0.3765	0.3765	0.3765	0.3765	0.3765
0.4555	0.4555	0.4555	0.4555	0.4555	0.4555	0.4555	0.4555	0.4555	0.4555	0.4555	0.4555	0.4555	0.4555
0.0834	0.0834	0.0834	0.0834	0.0834	0.0834	0.0834	0.0834	0.0834	0.0834	0.0834	0.0834	0.0834	0.0834
0.1828	0.1828	0.1828	0.1828	0.1828	0.1828	0.1828	0.1828	0.1828	0.1828	0.1828	0.1828	0.1828	0.1828
0.2979	0.2979	0.2979	0.2979	0.2979	0.2979	0.2979	0.2979	0.2979	0.2979	0.2979	0.2979	0.2979	0.2979
0.3907	0.3907	0.3907	0.3907	0.3907	0.3907	0.3907	0.3907	0.3907	0.3907	0.3907	0.3907	0.3907	0.3907
0.4869	0.4869	0.4869	0.4869	0.4869	0.4869	0.4869	0.4869	0.4869	0.4869	0.4869	0.4869	0.4869	0.4869

0.5592	0.5592	0.5592	0.5592	0.5592	0.5592	0.5592	0.5592	0.5592	0.5592	0.5592	0.5592	0.5592	0.5592
0.0717	0.0717	0.0717	0.0717	0.0717	0.0717	0.0717	0.0717	0.0717	0.0717	0.0717	0.0717	0.0717	0.0717
0.2027	0.2027	0.2027	0.2027	0.2027	0.2027	0.2027	0.2027	0.2027	0.2027	0.2027	0.2027	0.2027	0.2027
0.3126	0.3126	0.3126	0.3126	0.3126	0.3126	0.3126	0.3126	0.3126	0.3126	0.3126	0.3126	0.3126	0.3126
0.4313	0.4313	0.4313	0.4313	0.4313	0.4313	0.4313	0.4313	0.4313	0.4313	0.4313	0.4313	0.4313	0.4313

$x_1$	$x_2$	$\rho$ /(g·cm <sup>-3</sup> )	$u$ /(m·s <sup>-1</sup> )	$\kappa_s$ /(TPa <sup>-1</sup> )	$\delta\kappa_s$ /(TPa <sup>-1</sup> )	$\delta V^E$ (cm <sup>-3</sup> ·mol <sup>-1</sup> )	$x_1$	$x_2$	$\rho$ /(g·cm <sup>-3</sup> )	$u$ /(m·s <sup>-1</sup> )	$\kappa_s$ /(TPa <sup>-1</sup> )	$\delta\kappa_s$ /(TPa <sup>-1</sup> )	$\delta V^E$ (cm <sup>-3</sup> ·mol <sup>-1</sup> )
290.65 K													
0.0511	0.9212	0.970670	1631.3	387.1	-110.1	-0.466	0.5001	0.3524	0.835819	1285.6	723.9	-37.8	-0.930
0.0576	0.8624	0.949516	1584.9	419.3	-105.6	-0.792	0.5882	0.3224	0.833082	1281.3	731.1	-43.9	-0.894
0.1494	0.8220	0.942384	1579.2	425.5	-117.6	-0.857	0.6649	0.3065	0.832063	1279.1	734.5	-47.3	-0.858
0.0610	0.7915	0.921862	1490.7	488.2	-70.3	-0.953	0.0780	0.3183	0.821105	1246.7	783.6	1.6	-0.819
0.1601	0.7459	0.913107	1477.5	501.6	-77.4	-0.960	0.2172	0.2861	0.819464	1245.0	787.3	-8.6	-0.782
0.2573	0.7152	0.913599	1489.3	493.5	-99.0	-1.075	0.3321	0.2680	0.819229	1244.9	787.6	-15.6	-0.768
0.0605	0.7210	0.896850	1419.8	553.1	-38.7	-0.972	0.4375	0.2620	0.820349	1248.3	782.3	-22.7	-0.768
0.1632	0.7053	0.902180	1445.0	530.8	-67.3	-1.074	0.5381	0.2379	0.818440	1244.3	789.1	-26.4	-0.707
0.2713	0.6446	0.890723	1420.7	556.2	-69.6	-1.080	0.6183	0.2310	0.819045	1246.8	785.4	-32.5	-0.707
0.3579	0.6152	0.888376	1418.8	559.2	-79.7	-1.106	0.6935	0.2208	0.818854	1245.5	787.2	-34.8	-0.685
0.0616	0.6394	0.876219	1369.5	608.5	-21.8	-1.049	0.7688	0.2027	0.817636	1243.3	791.2	-38.7	-0.656
0.1721	0.6110	0.875343	1372.5	606.5	-36.2	-1.063	0.0844	0.1737	0.804368	1209.4	850.0	-0.3	-0.524
0.2842	0.5666	0.871759	1372.2	609.2	-53.4	-1.123	0.2305	0.1619	0.804690	1210.2	848.5	-5.9	-0.509
0.3765	0.5365	0.867320	1362.4	621.1	-54.8	-1.041	0.3824	0.1403	0.804022	1208.5	851.6	-11.5	-0.473
0.4555	0.5126	0.866833	1367.7	616.7	-69.7	-1.095	0.4727	0.1329	0.804101	1208.3	851.8	-14.0	-0.455
0.0834	0.5326	0.857727	1326.5	662.6	-18.0	-1.200	0.5676	0.1291	0.804709	1209.3	849.7	-16.9	-0.451
0.1828	0.5210	0.857060	1328.7	660.9	-24.2	-1.092	0.6584	0.1176	0.804272	1207.7	852.5	-18.7	-0.420
0.2979	0.4810	0.853030	1323.2	669.6	-33.3	-1.053	0.7352	0.1134	0.804621	1208.0	851.7	-20.7	-0.411
0.3907	0.4560	0.851556	1322.3	671.7	-42.2	-1.044	0.7935	0.1116	0.806194	1212.1	844.3	-28.4	-0.485
0.4869	0.4344	0.850488	1322.5	672.3	-50.8	-1.018	0.8644	0.1052	0.803505	1203.5	859.3	-15.7	-0.287
0.5592	0.4131	0.849163	1321.2	674.7	-57.7	-1.019	0.0000	0.9524	0.977663	1618.1	390.7	-92.3	-0.339
0.0717	0.4371	0.837479	1282.0	726.5	0.6	-0.957	0.0218	0.9582	0.980968	1589.3	403.6	-76.4	-0.234
0.2027	0.4075	0.836465	1282.8	726.6	-12.0	-0.948	0.0350	0.9036	0.963750	1628.6	391.2	-114.5	-0.630
0.3126	0.3954	0.838219	1288.7	718.3	-24.9	-0.986	0.0423	0.8924	0.960168	1619.2	397.3	-113.6	-0.681
0.4313	0.3407	0.832165	1276.9	737.0	-31.0	-0.912	0.1078	0.8504	0.949831	1597.1	412.7	-117.4	-0.797
293.15 K													
$x_1$	$x_2$	$\rho$ /(g·cm <sup>-3</sup> )	$u$ /(m·s <sup>-1</sup> )	$\kappa_s$ /(TPa <sup>-1</sup> )	$\delta\kappa_s$ /(TPa <sup>-1</sup> )	$\delta V^E$ (cm <sup>-3</sup> ·mol <sup>-1</sup> )	$x_1$	$x_2$	$\rho$ /(g·cm <sup>-3</sup> )	$u$ /(m·s <sup>-1</sup> )	$\kappa_s$ /(TPa <sup>-1</sup> )	$\delta\kappa_s$ /(TPa <sup>-1</sup> )	$\delta V^E$ (cm <sup>-3</sup> ·mol <sup>-1</sup> )

0.0511	0.9212	0.969576	1628.5	388.9	-105.3	-0.464	0.5001	0.3524	0.833661	1277.3	735.2	-35.7	-0.923
0.0576	0.8624	0.947768	1578.9	423.3	-100.0	-0.780	0.5882	0.3224	0.830922	1273.0	742.7	-42.1	-0.888
0.1494	0.8220	0.940591	1573.0	429.7	-112.6	-0.846	0.6649	0.3065	0.829903	1270.8	746.2	-45.7	-0.853
0.0610	0.7915	0.919904	1484.4	493.4	-64.9	-0.939	0.0780	0.3183	0.818929	1238.0	796.7	4.6	-0.808
0.1601	0.7459	0.911117	1471.1	507.2	-72.7	-0.947	0.2172	0.2861	0.817294	1236.3	800.5	-6.1	-0.773
0.2573	0.7152	0.911639	1482.8	498.9	-95.0	-1.065	0.3321	0.2680	0.817064	1236.3	800.8	-13.5	-0.761
0.0605	0.7210	0.894813	1413.0	559.8	-33.4	-0.959	0.4375	0.2620	0.818185	1239.6	795.4	-20.8	-0.762
0.1632	0.7053	0.900155	1438.3	537.0	-62.9	-1.062	0.5381	0.2379	0.816280	1235.7	802.3	-24.9	-0.701
0.2713	0.6446	0.888663	1413.7	563.1	-65.7	-1.070	0.6183	0.2310	0.816885	1238.2	798.5	-31.2	-0.703
0.3579	0.6152	0.886304	1411.7	566.2	-76.2	-1.097	0.6935	0.2208	0.816694	1237.0	800.3	-33.7	-0.681
0.0616	0.6394	0.874133	1362.2	616.5	-17.0	-1.036	0.7688	0.2027	0.815477	1234.8	804.2	-37.9	-0.653
0.1721	0.6110	0.873248	1365.2	614.5	-31.9	-1.052	0.0844	0.1737	0.802199	1200.4	865.1	1.5	-0.516
0.2842	0.5666	0.869657	1364.9	617.3	-49.9	-1.113	0.2305	0.1619	0.802534	1201.3	863.4	-4.4	-0.503
0.3765	0.5365	0.865205	1354.9	629.6	-51.5	-1.032	0.3824	0.1403	0.801875	1199.7	866.5	-10.5	-0.468
0.4555	0.5126	0.864714	1360.2	625.1	-67.1	-1.087	0.4727	0.1329	0.801959	1199.5	866.6	-13.1	-0.452
0.0834	0.5326	0.855606	1318.7	672.1	-13.9	-1.190	0.5676	0.1291	0.802567	1200.6	864.4	-16.2	-0.448
0.1828	0.5210	0.854935	1320.9	670.4	-20.3	-1.082	0.6584	0.1176	0.802131	1199.0	867.2	-18.2	-0.418
0.2979	0.4810	0.850896	1315.3	679.3	-30.0	-1.044	0.7352	0.1134	0.802479	1199.3	866.4	-20.3	-0.410
0.3907	0.4560	0.849417	1314.3	681.5	-39.3	-1.036	0.7935	0.1116	0.804047	1203.4	858.8	-28.1	-0.484
0.4869	0.4344	0.848345	1314.5	682.2	-48.3	-1.011	0.8644	0.1052	0.801361	1194.9	874.0	-15.4	-0.286
0.5592	0.4131	0.847018	1313.1	684.8	-55.5	-1.013	0.0000	0.9524	0.976799	1617.1	391.5	-87.9	-0.339
0.0717	0.4371	0.835323	1273.7	737.9	4.5	-0.946	0.0218	0.9582	0.980273	1590.7	403.2	-73.1	-0.236
0.2027	0.4075	0.834310	1274.4	738.0	-8.7	-0.938	0.0350	0.9036	0.962307	1622.9	394.5	-108.6	-0.622
0.3126	0.3954	0.836066	1280.5	729.5	-22.0	-0.978	0.0423	0.8924	0.958620	1613.2	400.9	-107.7	-0.672
0.4313	0.3407	0.830005	1268.5	748.7	-28.7	-0.905	0.1078	0.8504	0.948122	1591.0	416.7	-112.0	-0.787

$x_1$	$x_2$	$\rho$ /(g·cm <sup>-3</sup> )	$u$ /(m·s <sup>-1</sup> )	$\kappa_s$ /(TPa <sup>-1</sup> )	$\delta\kappa_s$ /(TPa <sup>-1</sup> )	$\delta V^E$ (cm <sup>-3</sup> ·mol <sup>-1</sup> )	$x_1$	$x_2$	$\rho$ /(g·cm <sup>-3</sup> )	$u$ /(m·s <sup>-1</sup> )	$\kappa_s$ /(TPa <sup>-1</sup> )	$\delta\kappa_s$ /(TPa <sup>-1</sup> )	$\delta V^E$ (cm <sup>-3</sup> ·mol <sup>-1</sup> )
295.65 K													
0.0511	0.9212	0.968434	1625.5	390.8	-100.8	-0.461	0.5001	0.3524	0.831493	1269.0	746.8	-33.5	-0.916
0.0576	0.8624	0.946001	1572.8	427.3	-94.6	-0.769	0.5882	0.3224	0.828751	1264.6	754.5	-40.3	-0.881
0.1494	0.8220	0.938779	1566.8	433.9	-107.8	-0.836	0.6649	0.3065	0.827732	1262.4	758.1	-44.1	-0.847
0.0610	0.7915	0.917932	1478.0	498.7	-59.8	-0.927	0.0780	0.3183	0.816740	1229.3	810.2	7.6	-0.798
0.1601	0.7459	0.909113	1464.5	512.9	-68.1	-0.935	0.2172	0.2861	0.815110	1227.6	814.1	-3.6	-0.764
0.2573	0.7152	0.909647	1476.2	504.5	-91.2	-1.055	0.3321	0.2680	0.814885	1227.6	814.3	-11.4	-0.753
0.0605	0.7210	0.892763	1406.0	566.6	-28.3	-0.946	0.4375	0.2620	0.816010	1231.0	808.7	-19.0	-0.755
0.1632	0.7053	0.898116	1431.5	543.3	-58.5	-1.051	0.5381	0.2379	0.814107	1227.1	815.8	-23.3	-0.695

0.2713	0.6446	0.886586	1406.5	570.1	-61.9	-1.059	0.6183	0.2310	0.814714	1229.6	811.8	-29.9	-0.697
0.3579	0.6152	0.884221	1404.5	573.3	-72.9	-1.087	0.6935	0.2208	0.814524	1228.4	813.6	-32.5	-0.676
0.0616	0.6394	0.872035	1354.8	624.7	-12.2	-1.025	0.7688	0.2027	0.813308	1226.3	817.7	-37.0	-0.649
0.1721	0.6110	0.871145	1357.7	622.7	-27.7	-1.041	0.0844	0.1737	0.800018	1191.5	880.5	3.4	-0.507
0.2842	0.5666	0.867541	1357.5	625.6	-46.6	-1.104	0.2305	0.1619	0.800364	1192.5	878.7	-2.9	-0.496
0.3765	0.5365	0.863080	1347.3	638.3	-48.4	-1.023	0.3824	0.1403	0.799718	1190.9	881.7	-9.4	-0.463
0.4555	0.5126	0.862582	1352.6	633.6	-64.5	-1.079	0.4727	0.1329	0.799805	1190.8	881.8	-12.2	-0.448
0.0834	0.5326	0.853471	1310.8	681.9	-10.0	-1.180	0.5676	0.1291	0.800414	1191.9	879.5	-15.4	-0.444
0.1828	0.5210	0.852797	1313.0	680.2	-16.6	-1.072	0.6584	0.1176	0.799981	1190.3	882.3	-17.6	-0.415
0.2979	0.4810	0.848749	1307.3	689.4	-26.8	-1.035	0.7352	0.1134	0.800327	1190.7	881.3	-19.8	-0.407
0.3907	0.4560	0.847264	1306.3	691.6	-36.5	-1.027	0.7935	0.1116	0.801893	1194.8	873.6	-27.9	-0.482
0.4869	0.4344	0.846191	1306.5	692.3	-45.8	-1.003	0.8644	0.1052	0.799207	1186.3	889.1	-14.9	-0.283
0.5592	0.4131	0.844861	1305.0	695.0	-53.3	-1.005	0.0000	0.9524	0.979513	1616.0	390.9	-85.2	-0.415
0.0717	0.4371	0.833151	1265.4	749.6	8.3	-0.935	0.0218	0.9582	0.960830	1591.8	410.8	-62.1	0.149
0.2027	0.4075	0.832139	1266.1	749.7	-5.5	-0.929	0.0350	0.9036	0.975871	1617.4	391.7	-109.2	-0.961
0.3126	0.3954	0.833898	1272.2	740.9	-19.2	-0.969	0.0423	0.8924	0.957044	1607.3	404.4	-102.2	-0.663
0.4313	0.3407	0.827833	1260.1	760.7	-26.4	-0.897	0.1078	0.8504	0.946393	1584.9	420.6	-107.0	-0.777

$x_1$	$x_2$	$\rho$ /(g·cm <sup>-3</sup> )	$u$ /(m·s <sup>-1</sup> )	$\kappa_s$ /(TPa <sup>-1</sup> )	$\delta\kappa_s$ /(TPa <sup>-1</sup> )	$\delta V^E$ (cm <sup>-3</sup> ·mol <sup>-1</sup> )	$x_1$	$x_2$	$\rho$ /(g·cm <sup>-3</sup> )	$u$ /(m·s <sup>-1</sup> )	$\kappa_s$ /(TPa <sup>-1</sup> )	$\delta\kappa_s$ /(TPa <sup>-1</sup> )	$\delta V^E$ (cm <sup>-3</sup> ·mol <sup>-1</sup> )
298.15 K													
0.0511	0.9212	0.967245	1622.5	392.7	-96.6	-0.459	0.5001	0.3524	0.829310	1260.7	758.7	-31.3	-0.909
0.0576	0.8624	0.944222	1566.7	431.5	-89.5	-0.758	0.5882	0.3224	0.826569	1256.2	766.7	-38.5	-0.875
0.1494	0.8220	0.936950	1560.5	438.3	-103.3	-0.826	0.6649	0.3065	0.825548	1254.0	770.3	-42.5	-0.841
0.0610	0.7915	0.915950	1471.6	504.2	-54.9	-0.914	0.0780	0.3183	0.814534	1220.6	824.0	10.7	-0.788
0.1601	0.7459	0.907098	1457.9	518.7	-63.8	-0.924	0.2172	0.2861	0.812911	1218.9	827.9	-1.1	-0.756
0.2573	0.7152	0.907638	1469.5	510.2	-87.6	-1.045	0.3321	0.2680	0.812693	1218.9	828.1	-9.3	-0.746
0.0605	0.7210	0.890700	1399.0	573.6	-23.4	-0.934	0.4375	0.2620	0.813822	1222.4	822.3	-17.1	-0.748
0.1632	0.7053	0.896062	1424.7	549.8	-54.4	-1.040	0.5381	0.2379	0.811922	1218.5	829.6	-21.6	-0.689
0.2713	0.6446	0.884499	1399.4	577.3	-58.3	-1.049	0.6183	0.2310	0.812531	1221.0	825.5	-28.5	-0.692
0.3579	0.6152	0.882124	1397.2	580.7	-69.7	-1.078	0.6935	0.2208	0.812342	1219.9	827.3	-31.3	-0.671
0.0616	0.6394	0.869921	1347.4	633.2	-7.6	-1.013	0.7688	0.2027	0.811128	1217.7	831.4	-36.0	-0.644
0.1721	0.6110	0.869025	1350.2	631.2	-23.7	-1.030	0.0844	0.1737	0.797821	1182.5	896.4	5.4	-0.498
0.2842	0.5666	0.865413	1350.0	634.0	-43.4	-1.094	0.2305	0.1619	0.798181	1183.6	894.4	-1.3	-0.489
0.3765	0.5365	0.860939	1339.6	647.3	-45.2	-1.014	0.3824	0.1403	0.797548	1182.1	897.4	-8.1	-0.458
0.4555	0.5126	0.860437	1345.0	642.4	-62.0	-1.070	0.4727	0.1329	0.797637	1182.0	897.4	-11.1	-0.443
0.0834	0.5326	0.851318	1303.0	691.9	-6.1	-1.171	0.5676	0.1291	0.798247	1183.1	894.9	-14.4	-0.440
0.1828	0.5210	0.850643	1305.1	690.2	-12.9	-1.063	0.6584	0.1176	0.797819	1181.6	897.7	-16.8	-0.411

0.2979	0.4810	0.846585	1299.4	699.6	-23.6	-1.026	0.7352	0.1134	0.798166	1182.0	896.7	-19.2	-0.404
0.3907	0.4560	0.845097	1298.3	702.0	-33.7	-1.019	0.7935	0.1116	0.799728	1186.2	888.7	-27.5	-0.479
0.4869	0.4344	0.844023	1298.5	702.7	-43.4	-0.995	0.8644	0.1052	0.797045	1177.7	904.6	-14.2	-0.280
0.5592	0.4131	0.842689	1296.9	705.5	-51.2	-0.998	0.0000	0.9524	0.974886	1614.7	393.4	-79.8	-0.338
0.0717	0.4371	0.830963	1257.0	761.6	12.1	-0.924	0.0218	0.9582	0.978691	1592.6	402.8	-67.0	-0.239
0.2027	0.4075	0.829952	1257.8	761.7	-2.2	-0.919	0.0350	0.9036	0.959321	1611.9	401.2	-97.9	-0.607
0.3126	0.3954	0.831716	1263.9	752.7	-16.4	-0.961	0.0423	0.8924	0.955442	1601.6	408.1	-96.9	-0.655
0.4313	0.3407	0.825648	1251.7	773.0	-24.2	-0.890	0.1078	0.8504	0.944645	1578.8	424.7	-102.2	-0.768

$x_1$	$x_2$	$\rho$ /(g·cm <sup>-3</sup> )	$u$ /(m·s <sup>-1</sup> )	$\kappa_s$ /(TPa <sup>-1</sup> )	$\delta\kappa_s$ /(TPa <sup>-1</sup> )	$\delta V^E$ (cm <sup>3</sup> ·mol <sup>-1</sup> )	$x_1$	$x_2$	$\rho$ /(g·cm <sup>-3</sup> )	$u$ /(m·s <sup>-1</sup> )	$\kappa_s$ /(TPa <sup>-1</sup> )	$\delta\kappa_s$ /(TPa <sup>-1</sup> )	$\delta V^E$ (cm <sup>3</sup> ·mol <sup>-1</sup> )
300.65 K													
0.0511	0.9212	0.966005	1619.4	394.8	-92.7	-0.457	0.5001	0.3524	0.827115	1252.3	770.9	-29.3	-0.903
0.0576	0.8624	0.942427	1560.7	435.7	-84.6	-0.748	0.5882	0.3224	0.824372	1247.8	779.1	-36.8	-0.869
0.1494	0.8220	0.935105	1554.2	442.7	-99.0	-0.817	0.6649	0.3065	0.823353	1245.6	782.8	-41.0	-0.836
0.0610	0.7915	0.913955	1465.1	509.7	-50.2	-0.903	0.0780	0.3183	0.812312	1211.9	838.1	13.6	-0.778
0.1601	0.7459	0.905065	1451.2	524.6	-59.6	-0.913	0.2172	0.2861	0.810701	1210.2	842.2	1.3	-0.748
0.2573	0.7152	0.905612	1462.8	516.1	-84.1	-1.036	0.3321	0.2680	0.810486	1210.3	842.3	-7.2	-0.739
0.0605	0.7210	0.888623	1392.0	580.8	-18.6	-0.922	0.4375	0.2620	0.811622	1213.8	836.3	-15.2	-0.742
0.1632	0.7053	0.893995	1417.9	556.4	-50.5	-1.030	0.5381	0.2379	0.809725	1209.8	843.7	-20.0	-0.684
0.2713	0.6446	0.882395	1392.2	584.7	-54.8	-1.040	0.6183	0.2310	0.810337	1212.5	839.4	-27.2	-0.687
0.3579	0.6152	0.880013	1390.0	588.1	-66.8	-1.070	0.6935	0.2208	0.810149	1211.3	841.2	-30.1	-0.667
0.0616	0.6394	0.867792	1339.9	641.8	-3.2	-1.003	0.7688	0.2027	0.808939	1209.2	845.5	-35.1	-0.641
0.1721	0.6110	0.866892	1342.7	639.8	-19.8	-1.021	0.0844	0.1737	0.795609	1173.5	912.7	7.3	-0.490
0.2842	0.5666	0.863268	1342.5	642.7	-40.3	-1.086	0.2305	0.1619	0.795983	1174.7	910.4	0.3	-0.483
0.3765	0.5365	0.858783	1331.9	656.4	-42.3	-1.005	0.3824	0.1403	0.795362	1173.3	913.3	-7.0	-0.454
0.4555	0.5126	0.858277	1337.4	651.4	-59.7	-1.063	0.4727	0.1329	0.795459	1173.3	913.3	-10.1	-0.440
0.0834	0.5326	0.849151	1295.0	702.2	-2.4	-1.162	0.5676	0.1291	0.796072	1183.1	897.4	-26.9	-0.438
0.1828	0.5210	0.848475	1297.2	700.4	-9.4	-1.054	0.6584	0.1176	0.795646	1173.0	913.4	-16.1	-0.409
0.2979	0.4810	0.844410	1291.4	710.1	-20.6	-1.018	0.7352	0.1134	0.795993	1173.4	912.4	-18.6	-0.402
0.3907	0.4560	0.842917	1290.3	712.6	-31.0	-1.012	0.7935	0.1116	0.797553	1177.6	904.2	-27.1	-0.478
0.4869	0.4344	0.841841	1290.4	713.4	-41.1	-0.989	0.8644	0.1052	0.794876	1169.2	920.3	-13.6	-0.278
0.5592	0.4131	0.840505	1288.8	716.2	-49.2	-0.992	0.0000	0.9524	0.973845	1613.2	394.6	-76.1	-0.338
0.0717	0.4371	0.828762	1248.7	773.9	15.8	-0.914	0.0218	0.9582	0.977810	1593.2	402.9	-64.3	-0.240
0.2027	0.4075	0.827753	1249.4	773.9	0.9	-0.910	0.0350	0.9036	0.957781	1606.4	404.6	-93.0	-0.601
0.3126	0.3954	0.829519	1255.6	764.7	-13.7	-0.953	0.0423	0.8924	0.953816	1595.8	411.7	-92.0	-0.647

$x_1$	$x_2$	$\rho$ /(g·cm <sup>-3</sup> )	$u$ /(m·s <sup>-1</sup> )	$\kappa_s$ /(TPa <sup>-1</sup> )	$\delta\kappa_s$ /(TPa <sup>-1</sup> )	$\delta V^E$ (cm <sup>-3</sup> ·mol <sup>-1</sup> )	$x_1$	$x_2$	$\rho$ /(g·cm <sup>-3</sup> )	$u$ /(m·s <sup>-1</sup> )	$\kappa_s$ /(TPa <sup>-1</sup> )	$\delta\kappa_s$ /(TPa <sup>-1</sup> )	$\delta V^E$ (cm <sup>-3</sup> ·mol <sup>-1</sup> )
0.4313	0.3407	0.823449	1243.3	785.6	-22.0	-0.883	0.1078	0.8504	0.942876	1572.8	428.8	-97.7	-0.759
303.15 K													
0.0511	0.9212	0.964724	1616.2	396.9	-89.1	-0.455	0.5001	0.3524	0.824905	1244.0	783.4	-27.2	-0.895
0.0576	0.8624	0.940615	1554.6	439.9	-80.1	-0.739	0.5882	0.3224	0.822162	1239.4	791.8	-35.0	-0.862
0.1494	0.8220	0.933239	1547.8	447.3	-95.0	-0.807	0.6649	0.3065	0.821143	1237.2	795.6	-39.4	-0.830
0.0610	0.7915	0.911947	1458.5	515.5	-45.7	-0.892	0.0780	0.3183	0.810074	1203.2	852.7	16.6	-0.768
0.1601	0.7459	0.903020	1444.5	530.7	-55.7	-0.902	0.2172	0.2861	0.808469	1201.5	856.8	3.8	-0.739
0.2573	0.7152	0.903569	1456.0	522.1	-80.8	-1.027	0.3321	0.2680	0.808263	1201.6	856.9	-5.0	-0.731
0.0605	0.7210	0.886530	1384.9	588.1	-14.1	-0.911	0.4375	0.2620	0.809405	1205.2	850.6	-13.3	-0.735
0.1632	0.7053	0.891912	1410.9	563.2	-46.7	-1.020	0.5381	0.2379	0.807515	1201.2	858.3	-18.4	-0.678
0.2713	0.6446	0.880277	1384.9	592.3	-51.5	-1.030	0.6183	0.2310	0.808127	1203.9	853.8	-25.7	-0.681
0.3579	0.6152	0.877888	1382.7	595.8	-63.9	-1.061	0.6935	0.2208	0.807943	1202.7	855.6	-28.8	-0.662
0.0616	0.6394	0.865649	1332.5	650.7	1.0	-0.993	0.7688	0.2027	0.806735	1200.6	859.9	-34.1	-0.636
0.1721	0.6110	0.864742	1335.2	648.7	-16.0	-1.011	0.0844	0.1737	0.793381	1164.6	929.4	9.3	-0.482
0.2842	0.5666	0.861108	1335.0	651.6	-37.3	-1.077	0.2305	0.1619	0.793769	1165.9	926.9	1.9	-0.476
0.3765	0.5365	0.856613	1324.2	665.8	-39.4	-0.996	0.3824	0.1403	0.793165	1164.5	929.8	-5.7	-0.449
0.4555	0.5126	0.856100	1329.7	660.6	-57.4	-1.054	0.4727	0.1329	0.793264	1164.5	929.6	-8.9	-0.435
0.0834	0.5326	0.846968	1287.1	712.7	1.3	-1.153	0.5676	0.1291	0.793883	1165.8	926.9	-12.6	-0.433
0.1828	0.5210	0.846289	1289.2	710.9	-5.9	-1.045	0.6584	0.1176	0.793464	1164.4	929.6	-15.3	-0.406
0.2979	0.4810	0.842217	1283.4	720.9	-17.6	-1.009	0.7352	0.1134	0.793808	1164.8	928.5	-17.9	-0.398
0.3907	0.4560	0.840722	1282.2	723.5	-28.4	-1.003	0.7935	0.1116	0.795366	1169.0	920.0	-26.6	-0.475
0.4869	0.4344	0.839646	1282.3	724.3	-38.8	-0.981	0.8644	0.1052	0.792693	1160.6	936.5	-12.9	-0.274
0.5592	0.4131	0.838308	1280.8	727.2	-47.2	-0.984	0.0000	0.9524	0.972751	1611.5	395.8	-72.7	-0.337
0.0717	0.4371	0.826541	1240.3	786.5	19.4	-0.904	0.0218	0.9582	0.976872	1593.5	403.1	-61.7	-0.241
0.2027	0.4075	0.825535	1241.0	786.5	4.0	-0.901	0.0350	0.9036	0.956212	1601.0	408.0	-88.4	-0.594
0.3126	0.3954	0.827309	1247.2	777.0	-11.0	-0.945	0.0423	0.8924	0.952165	1590.1	415.4	-87.4	-0.639
0.4313	0.3407	0.821233	1234.9	798.5	-19.8	-0.875	0.1078	0.8504	0.941089	1566.6	432.9	-93.4	-0.750
305.65 K													
0.0511	0.9212	0.963398	1612.8	399.0	-85.6	-0.453	0.5001	0.3524	0.822678	1235.6	796.1	-25.3	-0.889
0.0576	0.8624	0.938785	1548.5	444.2	-75.8	-0.730	0.5882	0.3224	0.819937	1231.0	804.8	-33.4	-0.857
0.1494	0.8220	0.931356	1541.5	451.9	-91.2	-0.799	0.6649	0.3065	0.818920	1228.8	808.7	-38.1	-0.825
0.0610	0.7915	0.909925	1451.9	521.3	-41.5	-0.882	0.0780	0.3183	0.807820	1194.5	867.6	19.5	-0.759

0.1601	0.7459	0.900960	1437.7	537.0	-51.9	-0.893	0.2172	0.2861	0.806224	1192.8	871.8	6.2	-0.731
0.2573	0.7152	0.901509	1449.1	528.2	-77.8	-1.019	0.3321	0.2680	0.806027	1193.0	871.8	-3.0	-0.725
0.0605	0.7210	0.884424	1377.7	595.7	-9.7	-0.901	0.4375	0.2620	0.807175	1196.6	865.3	-11.6	-0.730
0.1632	0.7053	0.889815	1403.9	570.2	-43.2	-1.011	0.5381	0.2379	0.805289	1192.6	873.1	-16.9	-0.673
0.2713	0.6446	0.878142	1377.5	600.1	-48.3	-1.022	0.6183	0.2310	0.805906	1195.3	868.5	-24.5	-0.677
0.3579	0.6152	0.875744	1375.3	603.7	-61.2	-1.053	0.6935	0.2208	0.805723	1194.2	870.3	-27.8	-0.658
0.0616	0.6394	0.863490	1324.8	659.8	5.3	-0.983	0.7688	0.2027	0.804518	1192.2	874.6	-33.3	-0.633
0.1721	0.6110	0.862575	1327.6	657.8	-12.4	-1.002	0.0844	0.1737	0.791134	1155.6	946.5	11.3	-0.474
0.2842	0.5666	0.858935	1327.4	660.8	-34.6	-1.070	0.2305	0.1619	0.791539	1157.0	943.8	3.5	-0.470
0.3765	0.5365	0.854426	1316.4	675.4	-36.8	-0.989	0.3824	0.1403	0.790950	1155.7	946.6	-4.5	-0.445
0.4555	0.5126	0.853911	1322.0	670.1	-55.4	-1.048	0.4727	0.1329	0.791057	1155.8	946.3	-8.0	-0.432
0.0834	0.5326	0.844769	1279.2	723.5	4.7	-1.146	0.5676	0.1291	0.791679	1157.1	943.5	-11.8	-0.431
0.1828	0.5210	0.844088	1281.3	721.7	-2.6	-1.037	0.6584	0.1176	0.791268	1155.7	946.2	-14.7	-0.404
0.2979	0.4810	0.840009	1275.3	731.9	-14.8	-1.002	0.7352	0.1134	0.791611	1156.2	944.9	-17.4	-0.397
0.3907	0.4560	0.838512	1274.1	734.6	-25.9	-0.997	0.7935	0.1116	0.793166	1160.4	936.3	-26.3	-0.474
0.4869	0.4344	0.837436	1274.2	735.5	-36.7	-0.975	0.8644	0.1052	0.790500	1152.1	953.0	-12.4	-0.273
0.5592	0.4131	0.836094	1272.6	738.5	-45.4	-0.979	0.0000	0.9524	0.971600	1609.7	397.2	-69.4	-0.337
0.0717	0.4371	0.824303	1231.9	799.4	22.9	-0.895	0.0218	0.9582	0.975878	1593.6	403.5	-59.3	-0.243
0.2027	0.4075	0.823300	1232.6	799.4	7.0	-0.893	0.0350	0.9036	0.954613	1595.6	411.5	-84.1	-0.589
0.3126	0.3954	0.825080	1238.9	789.7	-8.5	-0.938	0.0423	0.8924	0.950488	1584.4	419.1	-83.0	-0.633
0.4313	0.3407	0.819005	1226.5	811.7	-17.8	-0.869	0.1078	0.8504	0.939281	1560.5	437.2	-89.4	-0.743

$x_1$	$x_2$	$\rho$ /(g·cm <sup>-3</sup> )	$u$ /(m·s <sup>-1</sup> )	$\kappa_s$ /(TPa <sup>-1</sup> )	$\delta\kappa_s$ /(TPa <sup>-1</sup> )	$\delta V^E$ (cm <sup>-3</sup> ·mol <sup>-1</sup> )	$x_1$	$x_2$	$\rho$ /(g·cm <sup>-3</sup> )	$u$ /(m·s <sup>-1</sup> )	$\kappa_s$ /(TPa <sup>-1</sup> )	$\delta\kappa_s$ /(TPa <sup>-1</sup> )	$\delta V^E$ (cm <sup>-3</sup> ·mol <sup>-1</sup> )
308.15 K													
0.0511	0.9212	0.962030	1609.5	401.3	-82.5	-0.451	0.5001	0.3524	0.820439	1227.3	809.3	-23.4	-0.882
0.0576	0.8624	0.936935	1542.5	448.6	-71.8	-0.722	0.5882	0.3224	0.817698	1222.6	818.2	-31.9	-0.851
0.1494	0.8220	0.929454	1535.1	456.6	-87.7	-0.791	0.6649	0.3065	0.816683	1220.4	822.1	-36.7	-0.819
0.0610	0.7915	0.907887	1445.3	527.3	-37.5	-0.873	0.0780	0.3183	0.805547	1185.8	882.9	22.3	-0.749
0.1601	0.7459	0.898884	1430.8	543.4	-48.4	-0.883	0.2172	0.2861	0.803961	1184.1	887.2	8.6	-0.723
0.2573	0.7152	0.899432	1442.2	534.5	-74.9	-1.011	0.3321	0.2680	0.803773	1184.3	887.1	-1.0	-0.717
0.0605	0.7210	0.882303	1370.6	603.4	-5.5	-0.891	0.4375	0.2620	0.804927	1187.9	880.3	-9.8	-0.723
0.1632	0.7053	0.887702	1396.9	577.3	-39.8	-1.002	0.5381	0.2379	0.803048	1184.0	888.4	-15.4	-0.667
0.2713	0.6446	0.875992	1370.2	608.1	-45.4	-1.013	0.6183	0.2310	0.803670	1186.7	883.6	-23.2	-0.671
0.3579	0.6152	0.873586	1367.9	611.8	-58.6	-1.045	0.6935	0.2208	0.803490	1185.7	885.3	-26.7	-0.653
0.0616	0.6394	0.861313	1317.1	669.3	9.3	-0.974	0.7688	0.2027	0.802288	1183.6	889.7	-32.4	-0.628
0.1721	0.6110	0.860394	1320.0	667.1	-8.9	-0.993	0.0844	0.1737	0.788870	1146.6	964.2	13.2	-0.466
0.2842	0.5666	0.856742	1319.8	670.1	-31.9	-1.062	0.2305	0.1619	0.789292	1148.1	961.2	5.1	-0.464

0.3765	0.5365	0.852223	1308.6	685.2	-34.2	-0.980	0.3824	0.1403	0.788721	1146.9	963.9	-3.3	-0.440
0.4555	0.5126	0.851707	1314.3	679.8	-53.4	-1.040	0.4727	0.1329	0.788835	1147.0	963.5	-6.9	-0.428
0.0834	0.5326	0.842552	1271.2	734.5	8.1	-1.138	0.5676	0.1291	0.789461	1148.4	960.5	-10.9	-0.427
0.1828	0.5210	0.841869	1273.3	732.7	0.6	-1.028	0.6584	0.1176	0.789055	1147.1	963.2	-13.9	-0.401
0.2979	0.4810	0.837784	1267.3	743.3	-12.1	-0.994	0.7352	0.1134	0.789401	1147.7	961.8	-16.7	-0.394
0.3907	0.4560	0.836285	1266.1	746.0	-23.6	-0.989	0.7935	0.1116	0.790955	1151.9	952.9	-25.9	-0.471
0.4869	0.4344	0.835207	1266.1	746.9	-34.6	-0.967	0.8644	0.1052	0.788295	1143.6	970.0	-11.7	-0.269
0.5592	0.4131	0.833865	1264.5	750.0	-43.7	-0.972	0.0000	0.9524	0.970403	1607.6	398.7	-66.3	-0.336
0.0717	0.4371	0.822049	1223.5	812.6	26.3	-0.885	0.0218	0.9582	0.974830	1593.4	404.0	-57.1	-0.244
0.2027	0.4075	0.821049	1224.2	812.7	9.9	-0.884	0.0350	0.9036	0.952986	1590.2	415.0	-80.1	-0.583
0.3126	0.3954	0.822836	1230.5	802.6	-6.1	-0.930	0.0423	0.8924	0.948786	1578.7	422.9	-79.0	-0.626
0.4313	0.3407	0.816758	1218.0	825.3	-15.8	-0.862	0.1078	0.8504	0.937453	1554.3	441.5	-85.7	-0.735

$x_1$	$x_2$	$\rho$ /(g·cm <sup>-3</sup> )	$u$ /(m·s <sup>-1</sup> )	$\kappa_s$ /(TPa <sup>-1</sup> )	$\delta\kappa_s$ /(TPa <sup>-1</sup> )	$\delta V^E$ (cm <sup>-3</sup> ·mol <sup>-1</sup> )	$x_1$	$x_2$	$\rho$ /(g·cm <sup>-3</sup> )	$u$ /(m·s <sup>-1</sup> )	$\kappa_s$ /(TPa <sup>-1</sup> )	$\delta\kappa_s$ /(TPa <sup>-1</sup> )	$\delta V^E$ (cm <sup>-3</sup> ·mol <sup>-1</sup> )
310.65 K													
0.0511	0.9212	0.960618	1605.9	403.6	-79.5	-0.449	0.5001	0.3524	0.818182	1218.9	822.6	-21.7	-0.876
0.0576	0.8624	0.935063	1536.3	453.1	-68.1	-0.714	0.5882	0.3224	0.815443	1214.2	831.8	-30.4	-0.845
0.1494	0.8220	0.927534	1528.6	461.4	-84.4	-0.784	0.6649	0.3065	0.81443	1212.0	835.9	-35.5	-0.813
0.0610	0.7915	0.905836	1438.6	533.5	-33.6	-0.864	0.0780	0.3183	0.803255	1177.0	898.6	25.1	-0.741
0.1601	0.7459	0.89679	1423.9	550.0	-45.0	-0.874	0.2172	0.2861	0.801681	1175.4	902.9	10.7	-0.715
0.2573	0.7152	0.897337	1435.3	541.0	-72.2	-1.003	0.3321	0.2680	0.801503	1175.6	902.7	0.8	-0.711
0.0605	0.7210	0.880164	1363.3	611.3	-1.5	-0.882	0.4375	0.2620	0.802663	1179.3	895.8	-8.2	-0.717
0.1632	0.7053	0.885572	1389.8	584.6	-36.6	-0.994	0.5381	0.2379	0.800792	1175.4	903.9	-14.1	-0.661
0.2713	0.6446	0.873825	1362.8	616.2	-42.6	-1.005	0.6183	0.2310	0.801419	1178.1	899.0	-22.0	-0.666
0.3579	0.6152	0.871414	1360.4	620.1	-56.3	-1.037	0.6935	0.2208	0.801242	1177.2	900.7	-25.7	-0.648
0.0616	0.6394	0.85912	1309.3	679.0	13.3	-0.965	0.7688	0.2027	0.800045	1175.1	905.1	-31.7	-0.623
0.1721	0.6110	0.858193	1312.3	676.6	-5.6	-0.985	0.0844	0.1737	0.786587	1137.7	982.2	15.0	-0.459
0.2842	0.5666	0.854535	1312.1	679.7	-29.4	-1.054	0.2305	0.1619	0.787028	1139.3	978.9	6.5	-0.458
0.3765	0.5365	0.850005	1300.8	695.3	-31.8	-0.973	0.3824	0.1403	0.786476	1138.1	981.6	-2.2	-0.436
0.4555	0.5126	0.849486	1306.5	689.7	-51.6	-1.033	0.4727	0.1329	0.786596	1138.3	981.1	-6.0	-0.424
0.0834	0.5326	0.840318	1263.2	745.8	11.2	-1.131	0.5676	0.1291	0.787229	1139.7	977.9	-10.1	-0.424
0.1828	0.5210	0.839635	1265.2	744.0	3.6	-1.021	0.6584	0.1176	0.786831	1138.4	980.6	-13.3	-0.398
0.2979	0.4810	0.835542	1259.2	754.9	-9.5	-0.987	0.7352	0.1134	0.787177	1139.1	979.1	-16.2	-0.391
0.3907	0.4560	0.834042	1257.9	757.7	-21.3	-0.982	0.7935	0.1116	0.788731	1143.3	969.9	-25.6	-0.468
0.4869	0.4344	0.832965	1257.9	758.7	-32.7	-0.960	0.8644	0.1052	0.786081	1135.1	987.3	-11.2	-0.267
0.5592	0.4131	0.83162	1256.3	761.9	-42.1	-0.965	0.0000	0.9524	0.969155	1605.4	400.3	-63.5	-0.336



0.0717	0.4371	0.819776	1215.1	826.2	29.6	-0.877	0.0218	0.9582	0.973731	1593.1	404.7	-55.0	-0.245
0.2027	0.4075	0.818782	1215.8	826.3	12.7	-0.877	0.0350	0.9036	0.95133	1584.8	418.5	-76.3	-0.578
0.3126	0.3954	0.820575	1222.2	815.9	-3.7	-0.923	0.0423	0.8924	0.94706	1573.0	426.7	-75.2	-0.620
0.4313	0.3407	0.814497	1209.6	839.1	-14.0	-0.855	0.1078	0.8504	0.935605	1548.2	445.9	-82.2	-0.728

$x_1$	$x_2$	$\rho$ /(g·cm <sup>-3</sup> )	$u$ /(m·s <sup>-1</sup> )	$\kappa_s$ /(TPa <sup>-1</sup> )	$\delta\kappa_s$ /(TPa <sup>-1</sup> )	$\delta V^E$ (cm <sup>-3</sup> ·mol <sup>-1</sup> )	$x_1$	$x_2$	$\rho$ /(g·cm <sup>-3</sup> )	$u$ /(m·s <sup>-1</sup> )	$\kappa_s$ /(TPa <sup>-1</sup> )	$\delta\kappa_s$ /(TPa <sup>-1</sup> )	$\delta V^E$ (cm <sup>-3</sup> ·mol <sup>-1</sup> )
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313.15 K

0.0511	0.9212	0.959169	1602.3	406.1	-76.7	-0.448	0.5001	0.3524	0.815908	1210.5	836.5	-19.9	-0.870
0.0576	0.8624	0.933176	1530.2	457.7	-64.5	-0.707	0.5882	0.3224	0.813171	1205.8	845.9	-29.0	-0.839
0.1494	0.8220	0.925594	1522.2	466.3	-81.3	-0.777	0.6649	0.3065	0.812165	1203.6	850.0	-34.2	-0.808
0.0610	0.7915	0.903770	1431.8	539.8	-30.0	-0.856	0.0780	0.3183	0.800946	1168.3	914.7	27.7	-0.732
0.1601	0.7459	0.894684	1416.9	556.7	-41.8	-0.866	0.2172	0.2861	0.799382	1166.6	919.2	13.1	-0.708
0.2573	0.7152	0.895225	1428.2	547.6	-69.7	-0.996	0.3321	0.2680	0.799215	1166.9	918.8	2.8	-0.705
0.0605	0.7210	0.878010	1356.0	619.4	2.3	-0.874	0.4375	0.2620	0.800384	1170.7	911.6	-6.6	-0.712
0.1632	0.7053	0.883426	1382.7	592.1	-33.6	-0.987	0.5381	0.2379	0.798519	1166.8	919.9	-12.6	-0.656
0.2713	0.6446	0.871643	1355.4	624.5	-39.9	-0.998	0.6183	0.2310	0.799152	1169.6	914.8	-20.9	-0.662
0.3579	0.6152	0.869223	1352.9	628.5	-54.1	-1.030	0.6935	0.2208	0.798981	1168.6	916.5	-24.6	-0.644
0.0616	0.6394	0.856910	1301.5	689.0	17.2	-0.958	0.7688	0.2027	0.797788	1166.6	921.0	-30.8	-0.619
0.1721	0.6110	0.855979	1304.6	686.4	-2.4	-0.977	0.0844	0.1737	0.784287	1128.7	1000.9	16.9	-0.452
0.2842	0.5666	0.852311	1304.5	689.5	-27.1	-1.048	0.2305	0.1619	0.784745	1130.4	997.3	8.1	-0.453
0.3765	0.5365	0.847770	1292.9	705.7	-29.4	-0.965	0.3824	0.1403	0.784211	1129.3	999.8	-1.0	-0.432
0.4555	0.5126	0.847248	1298.7	699.8	-49.9	-1.026	0.4727	0.1329	0.784341	1129.6	999.2	-5.0	-0.421
0.0834	0.5326	0.838066	1255.1	757.4	14.3	-1.124	0.5676	0.1291	0.784979	1131.1	995.8	-9.2	-0.421
0.1828	0.5210	0.837381	1257.2	755.5	6.5	-1.014	0.6584	0.1176	0.784591	1129.9	998.4	-12.7	-0.396
0.2979	0.4810	0.833282	1251.0	766.8	-6.9	-0.980	0.7352	0.1134	0.784940	1130.5	996.8	-15.6	-0.389
0.3907	0.4560	0.831782	1249.8	769.7	-19.2	-0.975	0.7935	0.1116	0.786491	1134.8	987.4	-25.2	-0.467
0.4869	0.4344	0.830704	1249.7	770.8	-30.8	-0.954	0.8644	0.1052	0.783851	1126.7	1005.1	-10.5	-0.265
0.5592	0.4131	0.829360	1248.1	774.0	-40.5	-0.959	0.0000	0.9524	0.967864	1603.1	402.1	-60.8	-0.335
0.0717	0.4371	0.817484	1206.7	840.2	32.8	-0.868	0.0218	0.9582	0.972585	1592.4	405.5	-53.1	-0.246
0.2027	0.4075	0.816497	1207.4	840.2	15.4	-0.869	0.0350	0.9036	0.949646	1579.4	422.1	-72.8	-0.573
0.3126	0.3954	0.818297	1213.8	829.5	-1.5	-0.916	0.0423	0.8924	0.945310	1567.3	430.6	-71.7	-0.614
0.4313	0.3407	0.812219	1201.1	853.4	-12.1	-0.849	0.1078	0.8504	0.933734	1542.0	450.4	-79.0	-0.722

$x_1$	$x_2$	$\rho$ /(g·cm <sup>-3</sup> )	$u$ /(m·s <sup>-1</sup> )	$\kappa_s$ /(TPa <sup>-1</sup> )	$\delta\kappa_s$ /(TPa <sup>-1</sup> )	$\delta V^E$ (cm <sup>-3</sup> ·mol <sup>-1</sup> )	$x_1$	$x_2$	$\rho$ /(g·cm <sup>-3</sup> )	$u$ /(m·s <sup>-1</sup> )	$\kappa_s$ /(TPa <sup>-1</sup> )	$\delta\kappa_s$ /(TPa <sup>-1</sup> )	$\delta V^E$ (cm <sup>-3</sup> ·mol <sup>-1</sup> )
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315.65 K

0.0511	0.9212	0.957681	1598.4	408.7	-74.2	-0.446	0.5001	0.3524	0.813622	1202.1	850.6	-18.3	-0.864
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0.0576	0.8624	0.931272	1524.0	462.3	-61.2	-0.700	0.5882	0.3224	0.810887	1197.3	860.2	-27.7	-0.834
0.1494	0.8220	0.923638	1515.7	471.3	-78.5	-0.770	0.6649	0.3065	0.809884	1195.1	864.4	-33.1	-0.803
0.0610	0.7915	0.901690	1424.9	546.2	-26.6	-0.848	0.0780	0.3183	0.798620	1159.5	931.3	30.3	-0.725
0.1601	0.7459	0.892561	1409.9	563.6	-38.8	-0.858	0.2172	0.2861	0.797069	1157.9	935.8	15.2	-0.702
0.2573	0.7152	0.893089	1421.2	554.4	-67.4	-0.988	0.3321	0.2680	0.796912	1158.3	935.4	4.5	-0.699
0.0605	0.7210	0.875844	1348.7	627.7	6.0	-0.866	0.4375	0.2620	0.798091	1162.1	927.9	-5.1	-0.706
0.1632	0.7053	0.881262	1375.5	599.8	-30.8	-0.979	0.5381	0.2379	0.796234	1158.1	936.3	-11.3	-0.652
0.2713	0.6446	0.869446	1347.8	633.1	-37.5	-0.991	0.6183	0.2310	0.796872	1161.0	931.1	-19.8	-0.657
0.3579	0.6152	0.867018	1345.3	637.2	-52.0	-1.024	0.6935	0.2208	0.796704	1160.1	932.7	-23.7	-0.639
0.0616	0.6394	0.854683	1293.6	699.2	20.8	-0.950	0.7688	0.2027	0.795516	1158.1	937.2	-30.3	-0.616
0.1721	0.6110	0.853748	1296.8	696.5	0.6	-0.970	0.0844	0.1737	0.781967	1119.7	1020.0	18.7	-0.445
0.2842	0.5666	0.850069	1296.8	699.6	-24.9	-1.041	0.2305	0.1619	0.782446	1121.5	1016.1	9.5	-0.448
0.3765	0.5365	0.845519	1285.0	716.2	-27.3	-0.958	0.3824	0.1403	0.781934	1120.5	1018.6	0.0	-0.429
0.4555	0.5126	0.844996	1290.9	710.2	-48.4	-1.020	0.4727	0.1329	0.782070	1120.9	1017.8	-4.1	-0.418
0.0834	0.5326	0.835798	1247.0	769.4	17.3	-1.118	0.5676	0.1291	0.782717	1122.4	1014.2	-8.5	-0.419
0.1828	0.5210	0.835112	1249.1	767.5	9.3	-1.007	0.6584	0.1176	0.782339	1121.2	1016.8	-12.1	-0.394
0.2979	0.4810	0.831009	1242.9	779.0	-4.6	-0.973	0.7352	0.1134	0.782688	1122.0	1014.9	-15.2	-0.387
0.3907	0.4560	0.829508	1241.6	782.0	-17.2	-0.969	0.7935	0.1116	0.784242	1126.2	1005.3	-25.0	-0.465
0.4869	0.4344	0.828429	1241.5	783.1	-29.1	-0.948	0.8644	0.1052	0.781610	1118.2	1023.3	-10.0	-0.263
0.5592	0.4131	0.827087	1240.0	786.4	-39.1	-0.953	0.0000	0.9524	0.966524	1600.5	403.9	-58.4	-0.334
0.0717	0.4371	0.815177	1198.2	854.5	35.9	-0.861	0.0218	0.9582	0.971390	1591.5	406.4	-51.3	-0.247
0.2027	0.4075	0.814196	1198.9	854.5	18.0	-0.862	0.0350	0.9036	0.947940	1574.0	425.8	-69.6	-0.568
0.3126	0.3954	0.816004	1205.3	843.5	0.7	-0.910	0.0423	0.8924	0.943539	1561.6	434.6	-68.4	-0.609
0.4313	0.3407	0.809926	1192.6	868.1	-10.3	-0.844	0.1078	0.8504	0.931847	1535.8	455.0	-75.9	-0.716

$x_1$	$x_2$	$\rho$ /(g·cm <sup>-3</sup> )	$u$ /(m·s <sup>-1</sup> )	$\kappa_s$ /(TPa <sup>-1</sup> )	$\delta\kappa_s$ /(TPa <sup>-1</sup> )	$\delta V^E$ (cm <sup>-3</sup> ·mol <sup>-1</sup> )	$x_1$	$x_2$	$\rho$ /(g·cm <sup>-3</sup> )	$u$ /(m·s <sup>-1</sup> )	$\kappa_s$ /(TPa <sup>-1</sup> )	$\delta\kappa_s$ /(TPa <sup>-1</sup> )	$\delta V^E$ (cm <sup>-3</sup> ·mol <sup>-1</sup> )
318.15 K													
0.0511	0.9212	0.956159	1594.5	411.4	-71.8	-0.444	0.5001	0.3524	0.811318	1193.7	865.1	-16.8	-0.855
0.0576	0.8624	0.929349	1517.8	467.1	-58.2	-0.694	0.5882	0.3224	0.808586	1188.9	875.0	-26.5	-0.825
0.1494	0.8220	0.921662	1509.1	476.4	-75.9	-0.763	0.6649	0.3065	0.807587	1186.7	879.2	-32.1	-0.793
0.0610	0.7915	0.899594	1418.1	552.8	-23.3	-0.841	0.0780	0.3183	0.796272	1150.8	948.3	32.8	-0.716
0.1601	0.7459	0.890424	1402.7	570.8	-36.0	-0.850	0.2172	0.2861	0.794736	1149.1	952.9	17.2	-0.694
0.2573	0.7152	0.890935	1414.0	561.4	-65.3	-0.980	0.3321	0.2680	0.794591	1149.6	952.3	6.2	-0.691
0.0605	0.7210	0.873661	1341.3	636.2	9.4	-0.858	0.4375	0.2620	0.795779	1153.5	944.5	-3.7	-0.698
0.1632	0.7053	0.879088	1368.3	607.6	-28.2	-0.972	0.5381	0.2379	0.793932	1149.6	953.1	-10.2	-0.643
0.2713	0.6446	0.867232	1340.3	641.9	-35.1	-0.982	0.6183	0.2310	0.794575	1152.4	947.7	-18.9	-0.649
0.3579	0.6152	0.864793	1337.8	646.1	-50.1	-1.015	0.6935	0.2208	0.794412	1151.5	949.3	-22.9	-0.630

0.0616	0.6394	0.852441	1285.7	709.7	24.4	-0.943	0.7688	0.2027	0.793232	1149.6	953.9	-29.6	-0.607
0.1721	0.6110	0.851499	1289.1	706.7	3.4	-0.962	0.0844	0.1737	0.779628	1110.7	1039.7	20.5	-0.438
0.2842	0.5666	0.847813	1289.0	709.9	-22.9	-1.033	0.2305	0.1619	0.780128	1112.6	1035.4	10.9	-0.441
0.3765	0.5365	0.843252	1277.1	727.1	-25.3	-0.949	0.3824	0.1403	0.779637	1111.8	1037.8	1.0	-0.423
0.4555	0.5126	0.842728	1282.9	720.9	-46.9	-1.011	0.4727	0.1329	0.779785	1112.2	1036.8	-3.3	-0.412
0.0834	0.5326	0.833510	1239.0	781.6	20.0	-1.112	0.5676	0.1291	0.780437	1113.8	1032.9	-7.9	-0.413
0.1828	0.5210	0.832826	1241.0	779.7	12.0	-1.000	0.6584	0.1176	0.780070	1112.6	1035.5	-11.6	-0.388
0.2979	0.4810	0.828717	1234.7	791.6	-2.3	-0.965	0.7352	0.1134	0.780424	1113.4	1033.6	-14.8	-0.381
0.3907	0.4560	0.827215	1233.4	794.7	-15.3	-0.960	0.7935	0.1116	0.781976	1117.7	1023.6	-24.9	-0.458
0.4869	0.4344	0.826138	1233.3	795.8	-27.5	-0.938	0.8644	0.1052	0.779356	1109.7	1042.0	-9.6	-0.255
0.5592	0.4131	0.824795	1231.7	799.2	-37.8	-0.944	0.0000	0.9524	0.965147	1597.9	405.8	-56.1	-0.334
0.0717	0.4371	0.812850	1189.7	869.2	38.9	-0.853	0.0218	0.9582	0.970149	1590.5	407.5	-49.8	-0.248
0.2027	0.4075	0.811875	1190.4	869.3	20.5	-0.854	0.0350	0.9036	0.946204	1568.5	429.6	-66.6	-0.563
0.3126	0.3954	0.813690	1197.0	857.8	2.7	-0.902	0.0423	0.8924	0.941746	1555.9	438.7	-65.4	-0.604
0.4313	0.3407	0.807616	1184.1	883.1	-8.7	-0.835	0.1078	0.8504	0.929937	1529.5	459.7	-73.2	-0.709

$x_1$	$x_2$	$\rho$ /(g·cm <sup>-3</sup> )	$u$ /(m·s <sup>-1</sup> )	$\kappa_s$ /(TPa <sup>-1</sup> )	$\delta\kappa_s$ /(TPa <sup>-1</sup> )	$\delta V^E$ (cm <sup>-3</sup> ·mol <sup>-1</sup> )	$x_1$	$x_2$	$\rho$ /(g·cm <sup>-3</sup> )	$u$ /(m·s <sup>-1</sup> )	$\kappa_s$ /(TPa <sup>-1</sup> )	$\delta\kappa_s$ /(TPa <sup>-1</sup> )	$\delta V^E$ (cm <sup>-3</sup> ·mol <sup>-1</sup> )
320.65 K													
0.0511	0.9212	0.954601	1590.6	414.1	-69.7	-0.442	0.5001	0.3524	0.808998	1185.2	880.0	-15.5	-0.852
0.0576	0.8624	0.927410	1511.6	471.9	-55.3	-0.688	0.5882	0.3224	0.806266	1180.4	890.1	-25.6	-0.821
0.1494	0.8220	0.919670	1502.5	481.7	-73.4	-0.757	0.6649	0.3065	0.805274	1178.3	894.4	-31.3	-0.790
0.0610	0.7915	0.897483	1411.2	559.5	-20.3	-0.834	0.0780	0.3183	0.793906	1142.0	965.8	35.2	-0.710
0.1601	0.7459	0.888270	1395.6	578.0	-33.4	-0.843	0.2172	0.2861	0.792383	1140.4	970.5	19.1	-0.688
0.2573	0.7152	0.888766	1406.8	568.5	-63.4	-0.974	0.3321	0.2680	0.792251	1140.9	969.8	7.7	-0.687
0.0605	0.7210	0.871459	1333.9	644.9	12.8	-0.851	0.4375	0.2620	0.793450	1144.8	961.7	-2.4	-0.695
0.1632	0.7053	0.876894	1361.0	615.7	-25.8	-0.966	0.5381	0.2379	0.791611	1140.9	970.4	-9.2	-0.640
0.2713	0.6446	0.865000	1332.7	650.9	-33.1	-0.977	0.6183	0.2310	0.792260	1143.8	964.8	-18.1	-0.646
0.3579	0.6152	0.862555	1330.1	655.3	-48.4	-1.009	0.6935	0.2208	0.792103	1143.0	966.4	-22.3	-0.628
0.0616	0.6394	0.850181	1277.5	720.7	28.0	-0.937	0.7688	0.2027	0.790928	1141.1	971.0	-29.3	-0.605
0.1721	0.6110	0.849235	1281.2	717.3	6.1	-0.956	0.0844	0.1737	0.777268	1101.7	1060.0	22.2	-0.432
0.2842	0.5666	0.845539	1281.2	720.5	-21.0	-1.028	0.2305	0.1619	0.777789	1103.8	1055.3	12.2	-0.437
0.3765	0.5365	0.840967	1269.1	738.3	-23.4	-0.944	0.3824	0.1403	0.777323	1103.0	1057.5	1.9	-0.421
0.4555	0.5126	0.840444	1275.0	731.9	-45.7	-1.006	0.4727	0.1329	0.777479	1103.4	1056.4	-2.7	-0.411
0.0834	0.5326	0.831207	1230.8	794.1	22.7	-1.107	0.5676	0.1291	0.778140	1105.1	1052.3	-7.4	-0.412
0.1828	0.5210	0.830521	1232.9	792.2	14.4	-0.994	0.6584	0.1176	0.777782	1104.1	1054.8	-11.3	-0.388
0.2979	0.4810	0.826406	1226.4	804.5	-0.2	-0.960	0.7352	0.1134	0.778143	1104.9	1052.7	-14.7	-0.381

0.3907	0.4560	0.824906	1225.1	807.7	-13.5	-0.956	0.7935	0.1116	0.779695	1109.2	1042.5	-24.9	-0.459
0.4869	0.4344	0.823828	1225.0	808.9	-26.0	-0.934	0.8644	0.1052	0.777086	1101.2	1061.2	-9.3	-0.255
0.5592	0.4131	0.822487	1223.4	812.3	-36.7	-0.940	0.0000	0.9524	0.963724	1595.2	407.8	-54.1	-0.333
0.0717	0.4371	0.810502	1181.2	884.3	41.8	-0.846	0.0218	0.9582	0.968864	1589.2	408.7	-48.4	-0.248
0.2027	0.4075	0.809536	1181.9	884.3	22.8	-0.848	0.0350	0.9036	0.944444	1563.0	433.4	-63.8	-0.559
0.3126	0.3954	0.811360	1188.5	872.6	4.6	-0.897	0.0423	0.8924	0.939928	1550.1	442.8	-62.6	-0.599
0.4313	0.3407	0.805288	1175.7	898.4	-7.3	-0.831	0.1078	0.8504	0.928010	1523.2	464.4	-70.6	-0.704

$x_1$	$x_2$	$\rho$ /(g·cm <sup>-3</sup> )	$u$ /(m·s <sup>-1</sup> )	$\kappa_s$ /(TPa <sup>-1</sup> )	$\delta\kappa_s$ /(TPa <sup>-1</sup> )	$\delta V^E$ (cm <sup>-3</sup> ·mol <sup>-1</sup> )	$x_1$	$x_2$	$\rho$ /(g·cm <sup>-3</sup> )	$u$ /(m·s <sup>-1</sup> )	$\kappa_s$ /(TPa <sup>-1</sup> )	$\delta\kappa_s$ /(TPa <sup>-1</sup> )	$\delta V^E$ (cm <sup>-3</sup> ·mol <sup>-1</sup> )
323.15 K													
0.0511	0.9212	0.953007	1586.1	417.1	-67.6	-0.441	0.5001	0.3524	0.806669	1176.8	895.1	-14.5	-0.844
0.0576	0.8624	0.925450	1505.3	476.9	-52.7	-0.683	0.5882	0.3224	0.803944	1172.0	905.5	-24.9	-0.813
0.1494	0.8220	0.917656	1495.8	487.1	-71.3	-0.751	0.6649	0.3065	0.802955	1169.9	909.9	-30.9	-0.781
0.0610	0.7915	0.895363	1404.3	566.4	-17.5	-0.828	0.0780	0.3183	0.791531	1133.3	983.7	37.6	-0.703
0.1601	0.7459	0.886098	1388.4	585.5	-30.9	-0.835	0.2172	0.2861	0.790022	1131.7	988.4	20.9	-0.681
0.2573	0.7152	0.886572	1399.5	575.9	-61.6	-0.966	0.3321	0.2680	0.789903	1132.2	987.5	9.1	-0.680
0.0605	0.7210	0.869241	1326.4	653.9	16.0	-0.845	0.4375	0.2620	0.791112	1136.2	979.1	-1.4	-0.688
0.1632	0.7053	0.874683	1353.6	624.0	-23.5	-0.959	0.5381	0.2379	0.789284	1132.4	988.1	-8.4	-0.633
0.2713	0.6446	0.862751	1325.0	660.2	-31.1	-0.969	0.6183	0.2310	0.789940	1135.3	982.2	-17.6	-0.639
0.3579	0.6152	0.860284	1322.3	664.8	-46.9	-1.001	0.6935	0.2208	0.789789	1134.5	983.7	-22.0	-0.621
0.0616	0.6394	0.847903	1268.3	733.2	32.8	-0.930	0.7688	0.2027	0.788622	1132.7	988.4	-29.4	-0.597
0.1721	0.6110	0.846951	1273.4	728.2	8.6	-0.949	0.0844	0.1737	0.774898	1092.8	1080.7	23.8	-0.426
0.2842	0.5666	0.843246	1273.3	731.5	-19.3	-1.020	0.2305	0.1619	0.775441	1094.9	1075.7	13.4	-0.432
0.3765	0.5365	0.838666	1261.0	749.8	-21.8	-0.935	0.3824	0.1403	0.774999	1094.2	1077.7	2.6	-0.416
0.4555	0.5126	0.838145	1267.0	743.3	-44.7	-0.998	0.4727	0.1329	0.775166	1094.8	1076.3	-2.3	-0.406
0.0834	0.5326	0.828894	1222.8	806.9	25.1	-1.103	0.5676	0.1291	0.775836	1096.5	1072.1	-7.0	-0.407
0.1828	0.5210	0.828207	1224.8	804.9	16.7	-0.988	0.6584	0.1176	0.775490	1095.5	1074.4	-11.3	-0.383
0.2979	0.4810	0.824077	1218.2	817.7	1.7	-0.952	0.7352	0.1134	0.775858	1096.4	1072.2	-14.8	-0.376
0.3907	0.4560	0.822578	1216.9	821.0	-12.0	-0.947	0.7935	0.1116	0.777406	1100.8	1061.6	-25.4	-0.453
0.4869	0.4344	0.821502	1216.8	822.2	-24.9	-0.925	0.8644	0.1052	0.774817	1092.8	1080.7	-9.5	-0.249
0.5592	0.4131	0.820171	1215.2	825.6	-36.0	-0.931	0.0000	0.9524	0.962272	1592.4	409.8	-52.3	-0.333
0.0717	0.4371	0.808145	1172.7	899.8	44.5	-0.839	0.0218	0.9582	0.967543	1587.7	410.0	-47.1	-0.249
0.2027	0.4075	0.807189	1173.5	899.7	24.9	-0.841	0.0350	0.9036	0.942669	1557.6	437.3	-61.3	-0.556
0.3126	0.3954	0.809021	1180.1	887.5	6.3	-0.890	0.0423	0.8924	0.938096	1544.4	447.0	-60.0	-0.595
0.4313	0.3407	0.802955	1167.2	914.2	-6.2	-0.824	0.1078	0.8504	0.926070	1516.9	469.3	-68.4	-0.699