Monte Carlo simulation data for the thermodynamic properties of binary square-well mixtures

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Monte Carlo *NVT* simulations have been performed to obtain the thermodynamic properties of binary mixtures interacting by means of a potential of the form

$$u(r)=\begin{cases}\infty, & r\le\sigma_{ij}\\ -\varepsilon_{ij}, & \sigma_{ij}<r<\lambda\sigma_{ij}\\ 0, & r\ge\lambda\sigma_{ij}\end{cases}$$

where $\sigma_{ij}=\left(\sigma_i+\sigma_j\right)/2$ is the distance of closest approach between particle of species *i*, with core diameter σ_i, and another of species *j*, with core diameter σ_j, and $\varepsilon_{ij}=\sqrt{\varepsilon_i\varepsilon_j}$, where ε_i and ε_j are the potential depth for species *i* and *j*, respectively.

Mixtures with diameter ratios $\sigma_2/\sigma_1=1$, 2/3, 1/2, 1/3, and 1/5, potential depths ratios $\varepsilon_2/\varepsilon_1=1$ and 0.5, mole fractions $x_1=0.25$, 0.50, and 0.75, reduced temperatures $T^*=1.25$, 1.50, and 2.0, where $T^*=k_BT/\varepsilon_1$, and reduced densities ρ^* from 0.1 to 1.0 with step 0.1, where $\rho^*=\rho\sigma_{mix}^3$, with $\rho=N/V$ and $\sigma_{mix}^3=\sum_{i=1}^{2}x_i\sigma_i^3$ were considered. For all the species $\lambda=1.5$ was taken.

The properties determined are the excess energy $U^E/N\varepsilon_1$, the compressibility factor $Z=pV/Nk_BT$, and the coordination numbers N_{ij}, that is, the average number of particles of species *j* whose centers are at a distance $r\le\lambda\sigma_{ij}$ of the center of a particle of species *i*. We considered a system with $N=500$ particles in a cubic cell with periodic boundary conditions. The system was equilibrated for $N_e=5\times10^4$ cycles, each of them consisting in an attempted move per particle, followed by $N_c=2\times10^5$ cycles to determine the above-mentioned properties by averaging, with 100 partial averages to estimate the statistical uncertainty as the standard deviation. The data thus obtained are listed in Tables 1-27.

Table 1.

Simulation data for the thermodynamic properties of square-well mixtures with potential depth ratio $\varepsilon_2/\varepsilon_1 = 1$, diameter ratio $\sigma_2/\sigma_1 = 2/3$ and mole fraction $x_1 = 0.25$. The numbers in parentheses are the statistical errors in the last decimal figure.

T^*	ρ^*	N_{11}	N_{12}	N_{21}	N_{22}	Z	$U^E/N\varepsilon_1$
1.25	0.10	1.130(4)	2.008(3)	0.669(1)	1.047(1)	0.665(3)	-1.036(1)
	0.20	2.00(1)	3.75(2)	1.249(7)	2.02(1)	0.447(4)	-1.944(4)
	0.30	2.68(2)	5.13(4)	1.71(1)	2.82(2)	0.302(4)	-2.673(6)
	0.40	3.15(3)	6.18(5)	2.06(2)	3.48(3)	0.235(5)	-3.244(4)
	0.50	3.66(3)	7.28(6)	2.43(2)	4.12(4)	0.228(6)	-3.820(2)
	0.60	4.34(4)	8.50(7)	2.83(3)	4.85(4)	0.476(5)	-4.484(1)
	0.70	5.03(5)	9.85(9)	3.28(3)	5.62(5)	1.349(6)	-5.1982(7)
	0.80	5.60(5)	11.1(1)	3.70(3)	6.33(6)	3.165(8)	-5.8517(8)
	0.90	6.18(6)	12.0(1)	3.99(4)	7.04(6)	6.18(1)	-6.3998(8)
	1.00	6.55(6)	12.9(1)	4.29(4)	7.50(7)	10.85(2)	-6.848(1)
1.50	0.10	0.956(2)	1.705(1)	0.568	0.892	0.786(3)	-0.8803(5)
	0.20	1.73(1)	3.21(2)	1.068(6)	1.717(9)	0.647(3)	-1.661(2)
	0.30	2.37(2)	4.52(3)	1.51(1)	2.47(2)	0.558(3)	-2.354(2)
	0.40	2.96(3)	5.75(5)	1.92(2)	3.19(3)	0.554(5)	-3.002(2)
	0.50	3.58(3)	7.01(6)	2.34(2)	3.90(3)	0.656(5)	-3.664(1)
	0.60	4.27(4)	8.37(7)	2.79(2)	4.68(4)	1.052(5)	-4.3784(7)
	0.70	4.96(4)	9.73(9)	3.25(3)	5.48(5)	2.001(6)	-5.1065(7)
	0.80	5.57(5)	10.9(1)	3.65(3)	6.24(6)	3.819(8)	-5.7724(8)
	0.90	6.04(6)	12.0(1)	3.99(4)	6.89(6)	6.79(1)	-6.3318(8)
	1.00	6.47(6)	12.8(1)	4.25(4)	7.43(7)	11.42(2)	-6.784(1)
2.0	0.10	0.815(1)	1.451(1)	0.484	0.757	0.914(2)	-0.7487(2)
	0.20	1.530(9)	2.80(2)	0.934(5)	1.491(8)	0.875(3)	-1.4510(6)
	0.30	2.19(2)	4.10(3)	1.366(9)	2.21(2)	0.906(3)	-2.1264(8)
	0.40	2.85(2)	5.38(4)	1.79(1)	2.94(2)	0.998(4)	-2.8054(9)
	0.50	3.52(3)	6.73(6)	2.24(2)	3.71(3)	1.260(5)	-3.5138(7)
	0.60	4.22(4)	8.14(7)	2.71(2)	4.52(4)	1.794(5)	-4.2540(5)
	0.70	4.91(4)	9.50(8)	3.17(3)	5.34(5)	2.842(6)	-4.9919(6)
	0.80	5.51(5)	10.8(1)	3.59(3)	6.12(5)	4.648(7)	-5.6720(7)
	0.90	6.04(6)	11.7(1)	3.90(4)	6.84(6)	7.530(9)	-6.2466(9)
	1.00	6.45(6)	12.6(1)	4.19(4)	7.36(7)	12.04(2)	-6.707(1)

Table 2.
As in Table 1 for $x_1 = 0.50$.

T^*	ρ^*	N_{11}	N_{12}	N_{21}	N_{22}	Z	$U^E/N\varepsilon_1$
1.25	0.10	1.656(4)	0.986(1)	0.986(1)	0.515(1)	0.665(3)	-1.036(2)
	0.20	3.05(2)	1.88(2)	1.88(1)	1.006(6)	0.440(4)	-1.951(5)
	0.30	4.06(3)	2.59(2)	2.59(2)	1.42(1)	0.299(4)	-2.663(5)
	0.40	4.88(4)	3.17(3)	3.17(3)	1.78(2)	0.225(5)	-3.248(4)
	0.50	5.72(5)	3.72(3)	3.72(3)	2.11(2)	0.234(6)	-3.819(2)
	0.60	6.75(6)	4.37(4)	4.37(4)	2.47(2)	0.495(6)	-4.488(1)
	0.70	7.82(7)	5.06(4)	5.06(4)	2.86(3)	1.356(7)	-5.2020(8)
	0.80	8.78(8)	5.70(5)	5.70(5)	3.25(3)	3.226(6)	-5.8535(7)
	0.90	9.55(9)	6.19(6)	6.19(6)	3.64(3)	6.28(1)	-6.390(1)
	1.00	10.1(1)	6.64(6)	6.64(6)	3.90(4)	10.95(2)	-6.827(1)
1.50	0.10	1.411(2)	0.839(1)	0.839(1)	0.439	0.784(2)	-0.8819(7)
	0.20	2.60(2)	1.600(9)	1.600(9)	0.854(5)	0.644(3)	-1.663(2)
	0.30	3.63(3)	2.28(2)	2.28(2)	1.243(9)	0.565(3)	-2.358(2)
	0.40	4.57(4)	2.92(2)	2.92(2)	1.61(1)	0.544(5)	-3.006(2)
	0.50	5.56(5)	3.57(3)	3.57(3)	1.98(2)	0.670(5)	-3.670(1)
	0.60	6.63(6)	4.27(4)	4.27(4)	2.38(2)	1.073(6)	-4.3845(7)
	0.70	7.72(7)	4.97(4)	4.96(4)	2.80(3)	2.021(6)	-5.1118(8)
	0.80	8.69(8)	5.60(5)	5.60(5)	3.20(3)	3.865(7)	-5.7749(8)
	0.90	9.42(9)	6.18(6)	6.18(6)	3.52(3)	6.862(9)	-6.3271(8)
	1.00	10.0(1)	6.62(6)	6.62(6)	3.83(4)	11.49(2)	-6.771(1)
2.0	0.10	1.202(1)	0.7130	0.7130	0.371	0.914(2)	-0.7498(3)
	0.20	2.29(1)	1.390(7)	1.390(7)	0.736(4)	0.876(3)	-1.4517(7)
	0.30	3.31(2)	2.05(1)	2.05(1)	1.100(7)	0.895(3)	-2.1282(8)
	0.40	4.34(3)	2.72(2)	2.72(2)	1.47(1)	1.001(4)	-2.8095(8)
	0.50	5.40(4)	3.41(3)	3.41(3)	1.86(2)	1.257(5)	-3.5183(6)
	0.60	6.51(5)	4.13(3)	4.13(3)	2.28(2)	1.799(6)	-4.2591(5)
	0.70	7.59(7)	4.85(4)	4.85(4)	2.70(2)	2.870(6)	-4.9972(5)
	0.80	8.55(8)	5.52(5)	5.52(5)	3.11(3)	4.688(7)	-5.6733(7)
	0.90	9.34(9)	6.06(6)	6.06(6)	3.51(3)	7.628(9)	-6.2424(9)
	1.00	9.90(9)	6.57(6)	6.57(6)	3.75(4)	12.16(2)	-6.697(1)

Table 3.
As in Table 1 for $x_1 = 0.75$.

T^*	ρ^*	N_{11}	N_{12}	N_{21}	N_{22}	z	$U^E/N\varepsilon_1$
1.25	0.10	1.969(3)	0.3900	1.169(1)	0.203	0.661(3)	-1.056(1)
	0.20	3.65(2)	0.751(4)	2.25(1)	0.402(3)	0.433(4)	-1.983(5)
	0.30	4.90(4)	1.037(8)	3.11(2)	0.572(5)	0.303(5)	-2.685(5)
	0.40	5.97(5)	1.28(1)	3.85(3)	0.720(7)	0.235(4)	-3.291(5)
	0.50	7.00(6)	1.52(1)	4.55(4)	0.853(9)	0.249(5)	-3.869(2)
	0.60	8.25(7)	1.77(2)	5.32(5)	1.00(1)	0.537(6)	-4.5465(7)
	0.70	9.56(8)	2.05(2)	6.16(5)	1.14(1)	1.494(6)	-5.2683(7)
	0.80	10.7(1)	2.31(2)	6.93(6)	1.33(2)	3.465(8)	-5.920(1)
	0.90	11.6(1)	2.53(2)	7.59(7)	1.48(2)	6.68(1)	-6.4510(8)
	1.00	12.4(1)	2.71(3)	8.14(8)	1.62(2)	11.60(2)	-6.873(1)
1.50	0.10	1.673(2)	0.3320	0.997(1)	0.174	0.782(3)	-0.8980(6)
	0.20	3.13(2)	0.640(3)	1.92(1)	0.340(2)	0.635(3)	-1.697(2)
	0.30	4.39(3)	0.913(6)	2.74(2)	0.497(4)	0.566(4)	-2.394(2)
	0.40	5.57(4)	1.177(9)	3.53(3)	0.644(6)	0.567(4)	-3.051(2)
	0.50	6.78(6)	1.44(1)	4.33(4)	0.799(7)	0.687(5)	-3.7245(9)
	0.60	8.10(7)	1.72(2)	5.17(4)	0.961(9)	1.111(6)	-4.4485(6)
	0.70	9.42(8)	2.01(2)	6.04(5)	1.12(1)	2.159(6)	-5.1833(6)
	0.80	10.6(1)	2.28(2)	6.85(6)	1.27(1)	4.098(8)	-5.8467(7)
	0.90	11.5(1)	2.51(2)	7.52(7)	1.45(2)	7.25(1)	-6.3896(8)
	1.00	12.2(1)	2.71(3)	8.12(8)	1.53(2)	12.09(2)	-6.808(1)
2.0	0.10	1.428(1)	0.2820	0.846	0.147	0.911(2)	-0.7654(2)
	0.20	2.75(1)	0.554(3)	1.662(9)	0.293(2)	0.878(3)	-1.4817(6)
	0.30	4.00(3)	0.820(6)	2.46(2)	0.440(3)	0.902(3)	-2.1698(8)
	0.40	5.25(4)	1.090(8)	3.27(3)	0.589(5)	1.019(3)	-2.8605(8)
	0.50	6.56(5)	1.37(1)	4.11(3)	0.749(6)	1.282(4)	-3.5796(6)
	0.60	7.92(7)	1.67(1)	4.99(4)	0.906(9)	1.877(5)	-4.3298(5)
	0.70	9.26(8)	1.96(2)	5.88(5)	1.08(1)	2.982(6)	-5.0762(6)
	0.80	10.45(9)	2.23(2)	6.70(6)	1.26(1)	4.915(8)	-5.7508(7)
	0.90	11.4(1)	2.47(2)	7.42(7)	1.42(2)	7.979(8)	-6.3104(9)
	1.00	12.1(1)	2.66(3)	7.99(8)	1.55(2)	12.73(2)	-6.741(1)

Table 4.

Simulation data for the thermodynamic properties of square-well mixtures with potential depth ratio $\varepsilon_2/\varepsilon_1 = 1$, diameter ratio $\sigma_2/\sigma_1 = 1/2$ and mole fraction $x_1 = 0.25$. The numbers in parentheses are the statistical errors in the last decimal figure.

T^*	ρ^*	N_{11}	N_{12}	N_{21}	N_{22}	Z	$U^E/N\varepsilon_1$
1.25	0.10	1.607(7)	2.089(3)	0.696(1)	0.631(1)	0.688(3)	-0.960(2)
	0.20	2.99(2)	4.09(2)	1.364(8)	1.280(7)	0.462(4)	-1.877(5)
	0.30	3.84(4)	5.62(4)	1.87(2)	1.84(1)	0.319(4)	-2.575(7)
	0.40	4.49(4)	6.81(6)	2.27(2)	2.31(2)	0.208(5)	-3.130(6)
	0.50	5.17(5)	7.88(7)	2.63(2)	2.72(2)	0.159(5)	-3.639(3)
	0.60	6.06(5)	9.16(8)	3.05(3)	3.16(3)	0.272(5)	-4.233(1)
	0.70	7.10(6)	10.58(9)	3.53(3)	3.66(3)	0.864(6)	-4.903(1)
	0.80	8.05(7)	11.9440	3.98(4)	4.16(4)	2.172(7)	-5.551(1)
	0.90	8.91(8)	13.1(1)	4.37(4)	4.64(4)	4.402(9)	-6.132(1)
	1.00	9.8(1)	14.2(1)	4.72(5)	5.06(5)	7.92(2)	-6.664(1)
1.50	0.10	1.322(4)	1.748(1)	0.583	0.533	0.804(2)	-0.8022(7)
	0.20	2.42(2)	3.36(2)	1.119(6)	1.057(5)	0.663(3)	-1.538(2)
	0.30	3.30(3)	4.80(3)	1.60(1)	1.56(1)	0.565(3)	-2.194(2)
	0.40	4.14(3)	6.14(5)	2.05(2)	2.03(2)	0.528(4)	-2.813(2)
	0.50	4.99(4)	7.46(6)	2.49(2)	2.51(2)	0.562(5)	-3.430(1)
	0.60	5.97(5)	8.90(8)	2.97(3)	3.00(3)	0.810(6)	-4.095(1)
	0.70	7.01(6)	10.37(9)	3.46(3)	3.53(3)	1.483(6)	-4.7914(9)
	0.80	7.94(7)	11.8(1)	3.93(4)	4.04(4)	2.846(6)	-5.4540(9)
	0.90	8.82(8)	12.9(1)	4.30(4)	4.59(4)	5.074(9)	-6.050(1)
	1.00	9.69(9)	13.9(1)	4.62(4)	5.09(5)	8.57(1)	-6.584(1)
2.0	0.10	1.121(2)	1.477(1)	0.492	0.449	0.922(1)	-0.6776(3)
	0.20	2.11(1)	2.89(2)	0.964(5)	0.900(5)	0.877(3)	-1.3238(7)
	0.30	3.01(2)	4.26(3)	1.42(1)	1.357(9)	0.875(4)	-1.9502(8)
	0.40	3.92(3)	5.64(4)	1.88(1)	1.83(1)	0.940(4)	-2.582(1)
	0.50	4.86(4)	7.07(6)	2.36(2)	2.32(2)	1.121(5)	-3.2440(8)
	0.60	5.86(5)	8.58(7)	2.86(2)	2.84(2)	1.513(5)	-3.9406(8)
	0.70	6.88(6)	10.08(9)	3.36(3)	3.38(3)	2.305(6)	-4.649(1)
	0.80	7.83(7)	11.5(1)	3.82(3)	3.95(3)	3.691(7)	-5.325(1)
	0.90	8.68(8)	12.7(1)	4.23(4)	4.49(4)	5.948(9)	-5.938(1)
	1.00	9.53(9)	13.6(1)	4.55(4)	5.01(5)	9.48(1)	-6.481(1)

Table 5.

As in Table 4 for $x_1 = 0.50$.

T^*	ρ^*	N_{11}	N_{12}	N_{21}	N_{22}	Z	$U^E/N\varepsilon_1$
1.25	0.10	1.944(5)	0.853(1)	0.853(1)	0.260	0.680(3)	-0.978(2)
	0.20	3.68(2)	1.70(1)	1.70(1)	0.538(3)	0.455(3)	-1.904(6)
	0.30	4.80(4)	2.35(2)	2.35(2)	0.784(6)	0.313(4)	-2.572(5)
	0.40	5.81(4)	2.90(2)	2.90(2)	0.992(8)	0.232(5)	-3.153(5)
	0.50	6.77(6)	3.41(3)	3.41(3)	1.18(1)	0.195(6)	-3.692(3)
	0.60	7.92(7)	3.95(3)	3.95(3)	1.38(1)	0.343(5)	-4.298(1)
	0.70	9.22(8)	4.55(4)	4.55(4)	1.59(2)	1.039(7)	-4.9794(9)
	0.80	10.38(9)	5.15(5)	5.15(5)	1.79(2)	2.566(8)	-5.6167(8)
	0.90	11.3(1)	5.66(5)	5.66(5)	2.04(2)	5.104(9)	-6.1712(9)
	1.00	12.2(1)	6.13(6)	6.13(6)	2.24(2)	8.98(2)	-6.665(1)
1.50	0.10	1.629(2)	0.7210	0.721	0.2200	0.801(2)	-0.8225(6)
	0.20	3.04(2)	1.405(7)	1.405(7)	0.442(2)	0.653(3)	-1.574(2)
	0.30	4.25(3)	2.03(1)	2.03(1)	0.659(5)	0.561(4)	-2.243(2)
	0.40	5.35(4)	2.62(2)	2.62(2)	0.863(7)	0.530(4)	-2.861(2)
	0.50	6.50(5)	3.21(3)	3.21(3)	1.070(9)	0.608(5)	-3.497(1)
	0.60	7.78(7)	3.82(3)	3.82(3)	1.29(1)	0.899(6)	-4.175(1)
	0.70	9.09(8)	4.44(4)	4.44(4)	1.52(1)	1.673(6)	-4.8731(8)
	0.80	10.25(9)	5.05(5)	5.05(5)	1.76(2)	3.202(7)	-5.5272(9)
	0.90	11.2(1)	5.59(5)	5.59(5)	2.00(2)	5.71(1)	-6.096(1)
	1.00	12.0(1)	6.02(6)	6.02(6)	2.26(2)	9.64(2)	-6.588(1)
2.0	0.10	1.389(1)	0.6090	0.609	0.185	0.924(2)	-0.6978(3)
	0.20	2.65(1)	1.206(6)	1.206(6)	0.373(2)	0.879(3)	-1.3595(7)
	0.30	3.85(3)	1.80(1)	1.80(1)	0.566(4)	0.884(4)	-2.0001(9)
	0.40	5.04(4)	2.39(2)	2.39(2)	0.768(6)	0.956(4)	-2.6474(9)
	0.50	6.29(5)	3.01(2)	3.01(2)	0.979(8)	1.161(4)	-3.3223(7)
	0.60	7.61(6)	3.65(3)	3.65(3)	1.21(1)	1.611(6)	-4.0283(6)
	0.70	8.91(8)	4.31(4)	4.31(4)	1.44(1)	2.485(6)	-4.7429(8)
	0.80	10.08(9)	4.94(4)	4.94(4)	1.68(2)	4.046(7)	-5.4094(9)
	0.90	11.1(1)	5.49(5)	5.49(5)	1.95(2)	6.521(9)	-5.997(1)
	1.00	11.9(1)	5.95(6)	5.95(6)	2.20(2)	10.39(2)	-6.495(1)

Table 6.

As in Table 4 for $x_1 = 0.75$.

T^*	ρ^*	N_{11}	N_{12}	N_{21}	N_{22}	Z	$U^E/N\varepsilon_1$
1.25	0.10	2.092(4)	0.3080	0.923(1)	0.094	0.665(2)	-1.027(2)
	0.20	3.88(2)	0.609(3)	1.83(1)	0.195(1)	0.437(4)	-1.936(4)
	0.30	5.28(4)	0.857(6)	2.57(2)	0.286(2)	0.305(4)	-2.659(4)
	0.40	6.35(5)	1.058(9)	3.18(3)	0.361(3)	0.225(5)	-3.219(4)
	0.50	7.47(6)	1.25(1)	3.75(3)	0.437(4)	0.222(5)	-3.795(2)
	0.60	8.78(8)	1.46(1)	4.37(4)	0.511(5)	0.476(6)	-4.4493(9)
	0.70	10.18(9)	1.68(2)	5.04(4)	0.584(6)	1.322(6)	-5.1520(8)
	0.80	11.4(1)	1.90(2)	5.69(5)	0.680(8)	3.146(7)	-5.7963(8)
	0.90	12.4(1)	2.10(2)	6.29(6)	0.76(1)	6.11(1)	-6.3312(8)
	1.00	13.2(1)	2.27(2)	6.82(6)	0.86(1)	10.67(2)	-6.777(1)
1.50	0.10	1.768(1)	0.2610	0.782	0.080	0.789(3)	-0.8684(6)
	0.20	3.32(2)	0.511(3)	1.534(8)	0.161(1)	0.648(3)	-1.647(2)
	0.30	4.65(3)	0.743(5)	2.23(2)	0.241(2)	0.569(4)	-2.331(2)
	0.40	5.91(5)	0.963(8)	2.89(2)	0.319(3)	0.550(4)	-2.978(2)
	0.50	7.21(6)	1.18(1)	3.54(3)	0.396(4)	0.657(5)	-3.635(1)
	0.60	8.61(7)	1.41(1)	4.22(4)	0.474(5)	1.041(6)	-4.3407(7)
	0.70	10.03(9)	1.64(1)	4.92(4)	0.560(6)	1.987(6)	-5.0604(7)
	0.80	11.3(1)	1.86(2)	5.59(5)	0.644(8)	3.781(7)	-5.7171(7)
	0.90	12.3(1)	2.07(2)	6.20(6)	0.75(1)	6.708(9)	-6.2668(9)
	1.00	13.1(1)	2.24(2)	6.72(6)	0.86(1)	11.23(2)	-6.711(1)
2.0	0.10	1.508(1)	0.2200	0.661	0.067	0.920(2)	-0.7390(2)
	0.20	2.90(2)	0.438(2)	1.315(7)	0.136(1)	0.878(3)	-1.4343(7)
	0.30	4.23(3)	0.655(4)	1.97(1)	0.207(1)	0.896(3)	-2.1047(9)
	0.40	5.56(4)	0.875(7)	2.63(2)	0.281(2)	0.989(4)	-2.7770(7)
	0.50	6.95(6)	1.105(9)	3.32(3)	0.359(3)	1.236(5)	-3.4797(6)
	0.60	8.41(7)	1.34(1)	4.03(3)	0.441(4)	1.777(5)	-4.2142(5)
	0.70	9.84(8)	1.59(1)	4.75(4)	0.527(5)	2.813(6)	-4.9452(6)
	0.80	11.1(1)	1.82(2)	5.45(25	0.629(7)	4.588(7)	-5.6157(8)
	0.90	12.2(1)	2.03(2)	6.09(6)	0.714(9)	7.44(1)	-6.1800(8)
	1.00	13.0(1)	2.22(2)	6.65(6)	0.81(1)	11.86(2)	-6.638(1)

Table 7.

Simulation data for the thermodynamic properties of square-well mixtures with potential depth ratio $\varepsilon_2/\varepsilon_1 = 1$, diameter ratio $\sigma_2/\sigma_1 = 1/3$ and mole fraction $x_1 = 0.25$. The numbers in parentheses are the statistical errors in the last decimal figure.

T^*	ρ^*	N_{11}	N_{12}	N_{21}	N_{22}	Z	$U^E/N\varepsilon_1$
1.25	0.10	2.12(1)	1.915(4)	0.638(1)	0.249	0.723(3)	-0.837(3)
	0.20	4.32(4)	4.08(3)	1.361(8)	0.569(3)	0.490(4)	-1.774(8)
	0.30	5.58(5)	5.72(5)	1.91(2)	0.862(6)	0.334(4)	-2.450(8)
	0.40	6.57(6)	7.02(6)	2.34(2)	1.116(9)	0.224(5)	-2.994(7)
	0.50	7.29(7)	7.95(7)	2.65(2)	1.31(1)	0.126(6)	-3.389(6)
	0.60	8.34(7)	8.99(8)	3.00(3)	1.50(1)	0.081(7)	-3.852(3)
	0.70	9.71(8)	10.25(9)	3.42(3)	1.73(2)	0.354(6)	-4.426(2)
	0.80	11.0(1)	11.6(1)	3.87(3)	1.99(2)	1.143(7)	-5.018(1)
	0.90	12.0(1)	12.9(1)	4.30(4)	2.29(2)	2.58(1)	-5.587(1)
	1.00	12.9(1)	14.1(1)	4.71(4)	2.60(2)	4.90(2)	-6.126(2)
1.50	0.10	1.684(5)	1.578(1)	0.526	0.205	0.827(2)	-0.6818(8)
	0.20	3.19(2)	3.15(2)	1.050(5)	0.430(2)	0.688(3)	-1.347(2)
	0.30	4.44(3)	4.61(3)	1.54(1)	0.661(4)	0.568(4)	-1.956(3)
	0.40	5.59(5)	5.94(5)	1.98(2)	0.888(7)	0.484(4)	-2.518(3)
	0.50	6.77(6)	7.23(6)	2.41(2)	1.110(9)	0.450(5)	-3.071(2)
	0.60	8.11(7)	8.57(7)	2.86(2)	1.34(1)	0.551(5)	-3.658(1)
	0.70	9.52(8)	9.97(9)	3.32(3)	1.59(1)	0.924(6)	-4.279(1)
	0.80	10.8(1)	11.4(1)	3.79(3)	1.87(2)	1.777(6)	-4.893(1)
	0.90	11.9(1)	12.7(1)	4.23(4)	2.18(2)	3.252(6)	-5.473(1)
	1.00	12.8(1)	13.9(1)	4.63(4)	2.52(2)	5.62(1)	-6.022(2)
2.0	0.10	1.408(2)	1.318(1)	0.439	0.170	0.929(2)	-0.5693(3)
	0.20	2.70(2)	2.64(1)	0.880(4)	0.352(2)	0.879(3)	-1.1292(7)
	0.30	3.93(3)	3.97(1)	1.322(9)	0.544(4)	0.855(3)	-1.687(1)
	0.40	5.14(4)	5.29(4)	1.76(2)	0.746(5)	0.867(4)	-2.246(1)
	0.50	6.45(5)	6.66(5)	2.22(2)	0.963(8)	0.952(4)	-2.833(1)
	0.60	7.85(7)	8.11(7)	2.70(2)	1.20(1)	1.176(5)	-3.4573(9)
	0.70	9.28(8)	9.57(8)	3.19(3)	1.45(1)	1.662(5)	-4.097(1)
	0.80	10.58(9)	11.0(1)	3.68(3)	1.73(2)	2.589(7)	-4.729(1)
	0.90	11.7(1)	12.4(1)	4.12(4)	2.06(12	4.115(8)	-5.323(1)
	1.00	12.7(1)	13.6(1)	4.54(4)	2.39(2)	6.53(1)	-5.885(1)

Table 8.
As in Table 7 for $x_1 = 0.50$.

T^*	ρ^*	N_{11}	N_{12}	N_{21}	N_{22}	z	$U^E/N\varepsilon_1$
1.25	0.10	2.133(5)	0.673(1)	0.673(1)	0.089	0.706(2)	-0.892(2)
	0.20	4.14(3)	1.385(7)	1.385(7)	0.199(1)	0.478(4)	-1.777(6)
	0.30	5.59(5)	1.98(2)	1.98(2)	0.309(2)	0.335)5)	-2.466(7)
	0.40	6.64(6)	2.45(2)	2.45(2)	0.405(3)	0.222(4)	-2.987(5)
	0.50	7.65(7)	2.85(3)	2.85(3)	0.483(4)	0.171(6)	-3.457(3)
	0.60	8.95(8)	3.28(3)	3.28(3)	0.570(5)	0.260(6)	-4.021(1)
	0.70	10.39(9)	3.76(3)	3.76(3)	0.663(6)	0.783(6)	-4.6426(9)
	0.80	11.7(1)	4.25(4)	4.25(4)	0.780(7)	2.001(7)	-5.241(1)
	0.90	12.7(1)	4.74(4)	4.74(4)	0.893(8)	4.057(9)	-5.777(1)
	1.00	13.6(1)	5.19(5)	5.19(5)	1.04(1)	7.33(2)	-6.254(1)
1.50	0.10	1.787(2)	0.565	0.5650	0.074	0.812(2)	-0.7476(6)
	0.20	3.36(2)	1.128(6)	1.128(6)	0.156(1)	0.671(3)	-1.444(2)
	0.30	4.74(3)	1.66(1)	1.66(1)	0.241(2)	0.578(4)	-2.074(2)
	0.40	6.02(5)	2.16(2)	2.16(2)	0.328(3)	0.523(4)	-2.665(2)
	0.50	7.31(6)	2.64(2)	2.64(2)	0.414(3)	0.542(5)	-3.249(2)
	0.60	8.75(7)	3.13(3)	3.13(3)	0.505(4)	0.755(5)	-3.8788(9)
	0.70	10.22(9)	3.64)3)	3.64(3)	0.603(5)	1.374(6)	-4.5273(9)
	0.80	11.5(1)	4.16(4)	4.16(4)	0.715(7)	2.627(7)	-5.1418(9)
	0.90	12.6(1)	4.66(4)	4.66(4)	0.839(8)	4.673(9)	-5.691(1)
	1.00	13.5(1)	5.12(5)	5.12(5)	0.99(1)	7.96(1)	-6.171(1)
2.0	0.10	1.516(1)	0.474	0.474	0.061	0.927(2)	-0.6312(2)
	0.20	2.92(2)	0.954(5)	0.954(5)	0.127(1)	0.876(3)	-1.2389(6)
	0.30	4.26(3)	1.44(1)	1.44(1)	0.198(1)	0.870(3)	-1.8336(9)
	0.40	5.61(4)	1.93(1)	1.93(1)	0.274(2)	0.912(4)	-2.4349(9)
	0.50	7.02(6)	2.43(2)	2.43(2)	0.353(3)	1.072(5)	-3.0607(9)
	0.60	8.52(7)	2.96(2)	2.96(2)	0.443(4)	1.419(5)	-3.7176(8)
	0.70	9.99(9)	3.50(3)	3.50(3)	0.541(5)	2.134(5)	-4.3808(8)
	0.80	11.3(1)	4.03(4)	4.03(4)	0.652(6)	3.403(6)	-5.0122(9)
	0.90	12.4(1)	4.54(4)	4.54(4)	0.782(7)	5.461(9)	-5.576(1)
	1.00	13.3(1)	5.01(5)	5.01(5)	0.927(9)	8.67(2)	-6.067(1)

Table 9.
As in Table 7 for $x_1 = 0.75$.

T^*	ρ^*	N_{11}	N_{12}	N_{21}	N_{22}	z	$U^E/N\varepsilon_1$
1.25	0.10	2.151(3)	0.228	0.685(1)	0.030	0.680(3)	-0.982(1)
	0.20	4.08(3)	0.465(2)	1.396(7)	0.068	0.450(4)	-1.889(6)
	0.30	5.53(4)	0.667(5)	2.00(2)	0.105(1)	0.323(4)	-2.588(6)
	0.40	6.67(6)	0.830(7)	2.49(2)	0.139(1)	0.243(5)	-3.143(4)
	0.50	7.82(7)	0.975(8)	2.93(3)	0.168(2)	0.219(5)	-3.684(2)
	0.60	9.16(8)	1.13(1)	3.39(3)	0.199(2)	0.433(5)	-4.308(1)
	0.70	10.62(9)	1.30(1)	3.89(3)	0.233(3)	1.221(6)	-4.9844(8)
	0.80	11.9(1)	1.47(1)	4.41(4)	0.273(3)	2.890(7)	-5.6078(7)
	0.90	13.0(1)	1.64(2)	4.92(4)	0.318(4)	5.66(1)	-6.1339(9)
	1.00	13.8(1)	1.80(2)	5.39(5)	0.365(5)	9.92(2)	-6.564(1)
1.50	0.10	1.829(1)	0.193	0.579	0.025	0.794(2)	-0.8338(5)
	0.20	3.43(2)	0.386(2)	1.158(6)	0.054	0.651(4)	-1.583(1)
	0.30	4.84(4)	0.568(4)	1.70(1)	0.083(1)	0.569(3)	-2.253(2)
	0.40	6.16(5)	0.740(6)	2.22(2)	0.113(1)	0.544(4)	-2.878(2)
	0.50	7.51(6)	0.906(7)	2.72(2)	0.144(1)	0.631(5)	-3.512(1)
	0.60	8.97(8)	1.079(9)	3.24(3)	0.175(2)	0.981(5)	-4.1946(7)
	0.70	10.46(9)	1.26(1)	3.77(3)	0.211(2)	1.848(6)	-4.8899(8)
	0.80	11.8(1)	1.44(1)	4.31(4)	0.249(3)	3.512(7)	-5.5275(8)
	0.90	12.8(1)	1.61(1)	4.82(4)	0.302(4)	6.21(1)	-6.0619(9)
	1.00	13.7(1)	1.77(2)	5.31(5)	0.347(5)	10.37(2)	-6.500(1)
2.0	0.10	1.557(1)	0.162	0.486	0.021	0.919(2)	-0.7080(3)
	0.20	3.01(2)	0.327(2)	0.981(5)	0.044	0.879(3)	-1.3775(6)
	0.30	4.39(3)	0.493(3)	1.48(1)	0.068	0.892(3)	-2.0236(8)
	0.40	5.78(4)	0.663(5)	1.99(2)	0.094(1)	0.974(4)	-2.6763(8)
	0.50	7.23(6)	0.836(7)	2.51(2)	0.122(1)	1.212(4)	-3.3534(6)
	0.60	8.75(7)	1.018(8)	3.05(3)	0.154(1)	1.690(5)	-4.0619(5)
	0.70	10.25(9)	1.21(1)	3.61(3)	0.187(2)	2.638(6)	-4.7695(7)
	0.80	11.6(1)	1.39(1)	4.17(4)	0.228(2)	4.300(7)	-5.4190(9)
	0.90	12.7(1)	1.57(1)	4.71(4)	0.270(3)	6.95(1)	-5.9736(9)
	1.00	13.5(1)	1.74(2)	5.21(5)	0.323(4)	11.10(2)	-6.420(1)

Table 10.

Simulation data for the thermodynamic properties of square-well mixtures with potential depth ratio $\varepsilon_2/\varepsilon_1 = 1$, diameter ratio $\sigma_2/\sigma_1 = 1/5$ and mole fraction $x_1 = 0.25$. The numbers in parentheses are the statistical errors in the last decimal figure.

T^*	ρ^*	N_{11}	N_{12}	N_{21}	N_{22}	Z	$U^E/N\varepsilon_1$
1.25	0.10	2.31(1)	1.528(2)	0.509(1)	0.064	0.767(2)	-0.695(2)
	0.20	4.72(4)	3.29(2)	1.096(6)	0.162(1)	0.558(3)	-1.472(6)
	0.30	6.30(6)	4.79(4)	1.60(1)	0.272(2)	0.405(4)	-2.087(7)
	0.40	7.34(7)	5.93(5)	1.98(2)	0.371(3)	0.285(5)	-2.538(7)
	0.50	8.32(8)	6.87(6)	2.29(2)	0.457(4)	0.197(5)	-2.928(5)
	0.60	9.42(8)	7.73(7)	2.58(2)	0.533(5)	0.117(6)	-3.311(3)
	0.70	10.8(1)	8.80(8)	2.93(3)	0.633(6)	0.266(6)	-3.792(2)
	0.80	12.2(1)	9.99(9)	3.33(3)	0.759(7)	0.795(7)	-4.302(2)
	0.90	13.2(1)	11.2(1)	3.7(3)	0.925(8)	1.800(8)	-4.811(1)
	1.00	14.1(1)	12.5(1)	4.2(4)	1.15(2)	3.44(1)	-5.321(2)
1.50	0.10	1.853(5)	1.269(1)	0.423	0.051	0.851(2)	-0.5679(8)
	0.20	3.56(2)	2.58(1)	0.860(4)	0.114(1)	0.722(3)	-1.133(2)
	0.30	5.05(4)	3.84(3)	1.281(9)	0.187(1)	0.612(3)	-1.662(3)
	0.40	6.37(5)	5.02(4)	1.67(1)	0.264(2)	0.525(4)	-2.148(2)
	0.50	7.70(6)	6.13(5)	2.04(2)	0.344(3)	0.485(5)	-2.623(2)
	0.60	9.13(8)	7.24(6)	2.41(2)	0.427(3)	0.507(6)	-3.111(2)
	0.70	10.64(9)	8.42(7)	2.81(2)	0.524(4)	0.745(5)	-3.633(1)
	0.80	12.0(1)	9.66(9)	3.22(3)	0.640(5)	1.337(6)	-4.1550(9)
	0.90	13.1(1)	10.9(1)	3.64(3)	0.786(7)	2.402(8)	-4.664(2)
	1.00	14.0(1)	12.2(1)	4.07(4)	0.979(8)	4.11(1)	-5.170(2)
2.0	0.10	1.549(2)	1.0590	0.353	0.041	0.939(2)	-0.4739(3
	0.20	3.00(2)	2.15(1)	0.717(4)	0.089	0.892(2)	-0.9457(7)
	0.30	4.39(3)	3.26(2)	1.086(7)	0.142(1)	0.861(3)	-1.417(1)
	0.40	5.79(4)	4.39(3)	1.46(1)	0.203(1)	0.849(4)	-1.897(1)
	0.50	7.27(6)	5.54(4)	1.85(2)	0.269(2)	0.891(4)	-2.3936(8)
	0.60	8.82(7)	6.74(6)	2.25(2)	0.344(3)	1.035(5)	-2.9155(7)
	0.700	10.38(9)	7.99(7)	2.66(2)	0.431(3)	1.377(5)	-3.4546(8)
	0.80	11.8(1)	9.27(8)	3.09(3)	0.536(4)	2.037(6)	-3.990(1)
	0.90	12.9(1)	10.56(9)	3.52(3)	0.664(5)	3.155(8)	-4.499(1)
	1.00	13.8(1)	11.8(1)	3.95(4)	0.829(7)	4.99(1)	-4.991(2)

Table 11.

As in Table 10 for $x_1 = 0.50$.

T^*	ρ^*	N_{11}	N_{12}	N_{21}	N_{22}	z	$U^E/N\varepsilon_1$
1.25	0.10	2.215(6)	0.5080	0.508	0.021	0.734(2)	-0.813(2)
	0.20	4.25(3)	1.046(5)	1.046(5)	0.052	0.520(3)	-1.599(5)
	0.30	5.73(5)	1.52(1)	1.52(1)	0.086(1)	0.380(4)	-2.213(5)
	0.40	6.89(6)	1.91(2)	1.91(2)	0.119(1)	0.278(5)	-2.705(5)
	0.50	7.97(7)	2.23(2)	2.23(2)	0.148(1)	0.221(5)	-3.146(3)
	0.60	9.31(8)	2.59(2)	2.59(2)	0.180(2)	0.288(6)	-3.666(1)
	0.70	10.78(9)	2.97(3)	2.97(3)	0.218(2)	0.760(6)	-4.234(1)
	0.80	12.1(1)	3.38(3)	3.38(3)	0.264(2)	1.844(6)	-4.779(1)
	0.90	13.1(1)	3.80(3)	3.80(3)	0.330(3)	3.680(9)	-5.268(1)
	1.00	14.0(1)	4.22(4)	4.22(4)	0.407(4)	6.25(3)	-5.702(2)
1.50	0.10	1.847(2)	0.4280	0.428	0.017	0.832(2)	-0.6799(6)
	0.20	3.49(2)	0.864(4)	0.864(4)	0.039	0.699(3)	-1.314(2)
	0.30	4.92(4)	1.282(9)	1.282(9)	0.063	0.606(3)	-1.887(2)
	0.40	6.27(5)	1.68(1)	1.68(1)	0.089(1)	0.548(4)	-2.430(2)
	0.50	7.62(6)	2.06(2)	2.06(2)	0.118(1)	0.557(5)	-2.965(1)
	0.60	9.10(8)	2.45(2)	2.45(2)	0.148(1)	0.763(6)	-3.5352(8)
	0.70	10.61(9)	2.85(3)	2.85(3)	0.182(2)	1.295(6)	-4.1231(7)
	0.80	11.9(1)	3.27(3)	3.27(3)	0.225(2)	2.403(6)	-4.6782(9)
	0.90	13.0(1)	3.70(3)	3.70(3)	0.280(2)	4.237(9)	-5.173(1)
	1.00	13.8(1)	4.13(4)	4.13(4)	0.353(3)	7.10(1)	-5.612(1)
2.0	0.10	1.568(1)	0.3590	0.359	0.014	0.929(2)	-0.5751(2)
	0.20	3.03(2)	0.729(4)	0.729(4)	0.030	0.889(3)	-1.1288(6)
	0.30	4.43(3)	1.105(7)	1.105(7)	0.049	0.875(3)	-1.6730(8)
	0.40	5.84(5)	1.49(1)	1.49(1)	0.069	0.910(3)	-2.2200(7)
	0.50	7.32(6)	1.88(2)	1.88(2)	0.092(1)	1.032(4)	-2.7911(6)
	0.60	8.85(7)	2.29(2)	2.29(2)	0.119(1)	1.350(5)	-3.3853(6)
	0.70	10.38(9)	2.71(2)	2.71(2)	0.149(1)	1.974(5)	-3.9875(7)
	0.80	11.7(1)	3.14(3)	3.14(3)	0.186(2)	3.105(6)	-4.55348)
	0.90	12.9(1)	3.58(3)	3.58(3)	0.233(2)	4.943(9)	-5.0605(9)
	1.00	13.8(1)	4.02(4)	4.02(4)	0.286(3)	7.16(5)	-5.530(3)

Table 12.

As in Table 10 for $x_1 = 0.75$.

T^*	ρ^*	N_{11}	N_{12}	N_{21}	N_{22}	Z	$U^E/N\varepsilon_1$
1.25	0.10	2.183(4)	0.1690	0.507	0.007	0.688(3)	-0.946(2)
	0.20	4.11(3)	0.343(2)	1.030(5)	0.017	0.472(4)	-1.801(5)
	0.30	5.56(4)	0.497(4)	1.49(1)	0.028	0.345(4)	-2.462(5)
	0.40	6.74(6)	0.628(5)	1.88(2)	0.039	0.260(5)	-3.004(5)
	0.50	7.91(7)	0.743(6)	2.23(2)	0.050	0.240(5)	-3.529(2)
	0.60	9.28(8)	0.863(7)	2.59(2)	0.060(1)	0.450(5)	-4.1349(9)
	0.70	10.75(9)	0.993(9)	2.98(3)	0.074(1)	1.208(6)	-4.7868(7)
	0.80	12.1(1)	1.13(1)	3.39(3)	0.090(1)	2.814(7)	-5.3836(7)
	0.90	13.1(1)	1.27(1)	3.81(3)	0.112(1)	5.460(9)	-5.8820(9)
	1.00	13.9(1)	1.42(1)	4.25(4)	0.142(2)	9.44(2)	-6.296(1)
1.50	0.10	1.846(1)	0.1430	0.430	0.006	0.851(2)	-0-8005(5)
	0.20	3.48(2)	0.289(1)	0.866(4)	0.013	0.669(2)	-1.522(1)
	0.30	4.90(4)	0.428(3)	1.284(9)	0.021	0.581(4)	-2.162(2)
	0.40	6.24(5)	0.560(4)	1.68(1)	0.030	0.555(4)	-2.763(2)
	0.50	7.62(6)	0.689(6)	2.07(2)	0.040	0.648(5)	-3.379(1)
	0.60	9.09(8)	0.819(7)	2.46(2)	0.050	0.975(5)	-4.0282(6)
	0.70	10.59(9)	0.956(8)	2.87(3)	0.062(1)	1.810(6)	-4.6954(5)
	0.80	11.9(1)	1.10(1)	3.29(3)	0.077(1)	3.402(7)	-5.3038(8)
	0.90	13.0(1)	1.24(1)	3.72(3)	0.095(1)	6.006(1)	-5.815(1)
	1.00	13.8(1)	1.39(1)	4.16(4)	0.120(1)	9.98(2)	-6.232(1)
2.0	0.10	1.574(1)	0.1200	0.361	0.005	0.924(2)	-0.6810(3)
	0.20	3.04(2)	0.244(1)	0.733(4)	0.010	0.882(3)	-1.3238(6)
	0.30	4.45(3)	0.370(2)	1.111(7)	0.016	0.890(3)	-1.9470(7)
	0.40	5.86(5)	0.498(4)	1.49(1)	0.023	0.972(4)	-2.5729(7)
	0.50	7.33(6)	0.630(5)	1.89(2)	0.031	1.192(4)	-3.2233(6)
	0.60	8.86(7)	0.766(6)	2.30(2)	0.040	1.660(6)	-3.9022(4)
	0.70	10.38(9)	0.908(8)	2.72(2)	0.050	2.572(6)	-4.5785(6)
	0.80	11.7(1)	1.053(9)	3.16(3)	0.063(1)	4.163(7)	-5.1992(8)
	0.90	12.8(1)	1.20(1)	3.60(3)	0.079(1)	6.72(1)	-5.7244(8)
	1.00	13.7(1)	1.34(1)	4.03(4)	0.101(1)	10.67(2)	-6.146(1)

Table 13.

Simulation data for the thermodynamic properties of square-well mixtures with potential depth ratio $\varepsilon_2/\varepsilon_1 = 0.5$, diameter ratio $\sigma_2/\sigma_1 = 1$ and mole fraction $x_1 = 0.25$. The numbers in parentheses are the statistical errors in the last decimal figure.

T^*	ρ^*	N_{11}	N_{12}	N_{21}	N_{22}	Z	$U^E/N\varepsilon_1$
1.25	0.10	0.529(1)	1.256(1)	0.419	1.082	0.921(2)	-0.491(2)
	0.20	1.000(6)	2.40(1)	0.801(4)	2.12(1)	0.894(3)	-0.947(5)
	0.30	1.41(1)	3.47(2)	1.156(8)	3.15(2)	0.929(4)	-1.379(6)
	0.40	1.79(2)	4.50(4)	1.50(1)	4.21(3)	1.069(4)	-1.810(6)
	0.50	2.13(2)	5.59(5)	1.86(2)	5.33(4)	1.385(5)	-2.254(5)
	0.60	2.50(2)	6.69(6)	2.23(2)	6.51(5)	2.034(5)	-2.715(4)
	0.70	2.90(3)	7.74(7)	2.58(2)	7.69(7)	3.229(6)	-3.172(5)
	0.80	3.18(3)	8.76(8)	2.92(3)	8.72(8)	5.289(7)	-3.581(5)
	0.90	3.44(4)	9.57(9)	3.19(3)	9.57(9)	8.56(1)	-3.915(6)
1.50	0.10	0.465	1.158(1)	0.386	1.025	0.980(2)	-0.4550(1)
	0.20	0.891(5)	2.25(1)	0.750(4)	2.03(1)	1.003(3)	-0.8902(3)
	0.30	1.29(1)	3.31(2)	1.104(8)	3.06(2)	1.102(4)	-1.3201(4)
	0.40	1.67(1)	4.38(3)	1.46(1)	4.13(3)	1.308(4)	-1.7567(4)
	0.50	2.02(2)	5.49(4)	1.83(2)	5.27(4)	1.701(5)	-2.2105(4)
	0.60	2.43(2)	6.60(6)	2.20(2)	6.46(5)	2.403(5)	-2.6800(3)
	0.70	2.80(3)	7.69(7)	2.56(2)	7.63(7)	3.655(5)	-3.1391(4)
	0.80	3.11(3)	8.70(8)	2.90(3)	8.66(8)	5.696(7)	-3.5513(5)
	0.90	3.35(4)	9.55(9)	3.18(3)	9.51(9)	8.90(1)	-3.8907(7)
2.0	0.10	0.401	1.049	0.350	0.960	1.048(2)	-0.4157(1)
	0.20	0.787(4)	2.09(1)	0.696(4)	1.94(1)	1.148(3)	-0.8320(2)
	0.30	1.167(8)	3.14(2)	1.046(7)	2.97(2)	1.324(3)	-1.2566(3)
	0.40	1.54(1)	4.23(3)	1.41(1)	4.05(3)	1.606(4)	-1.6994(3)
	0.50	1.93(2)	5.36(4)	1.79(1)	5.20(4)	2.078(4)	-2.1621(3)
	0.60	2.33(2)	6.49(5)	2.16(2)	6.39(5)	2.881(5)	-2.6356(3)
	0.70	2.71(3)	7.59(7)	2.53(2)	7.55(6)	4.166(5)	-3.0974(3)
	0.80	3.04(3)	8.61(8)	2.87(3)	8.60(8)	6.200(8)	-3.5151(5)
	0.90	3.32(3)	9.46(9)	3.15(3)	9.46(9)	9.37(1)	-3.8602(5)

Table 14.

As in Table 13 for $x_1 = 0.50$.

T^*	ρ^*	N_{11}	N_{12}	N_{21}	N_{22}	Z	$U^E/N\varepsilon_1$
1.25	0.10	1.065(1)	0.835	0.835	0.719	0.840(3)	-0.6511(3)
	0.20	2.00(1)	1.580(8)	1.580(8)	1.400(7)	0.747(3)	-1.2345(9)
	0.30	2.79(2)	2.27(2)	2.27(2)	2.07(1)	0.727(4)	-1.757(1)
	0.40	3.49(3)	2.93(2)	2.93(2)	2.78(2)	0.806(4)	-2.255(1)
	0.50	4.16(4)	3.64(3)	3.64(3)	3.53(3)	1.028(6)	-2.7681(8)
	0.60	4.85(4)	4.39(4)	4.39(4)	4.34(4)	1.604(6)	-3.3053(6)
	0.70	5.54(5)	5.13(5)	5.13(5)	5.15(4)	2.751(6)	-3.8441(5)
	0.80	6.21(6)	5.76(5)	5.76(5)	5.89(5)	4.831(7)	-4.3270(7)
	0.90	6.72(6)	6.31(6)	6.31(6)	6.46(6)	8.144(1)	-4.7186(8)
1.50	0.10	0.929(1)	0.767	0.767	0.680	0.918(2)	-0.5884(2)
	0.20	1.77(1)	1.481(8)	1.481(8)	1.342(7)	0.896(3)	-1.1339(6)
	0.30	2.53(2)	2.17(2)	2.17(2)	2.02(1)	0.933(4)	-1.6519(8)
	0.40	3.26(3)	2.86(2)	2.86(2)	2.73(2)	1.077(4)	-2.1676(7)
	0.50	3.98(3)	3.58(3)	3.58(3)	3.50(3)	1.399(5)	-2.6996(7)
	0.60	4.70(4)	4.35(4)	4.35(4)	4.30(4)	2.039(5)	-3.2509(5)
	0.70	5.44(5)	5.09(4)	5.09(4)	5.11(4)	3.243(6)	-3.7960(5)
	0.80	6.08(6)	5.77(5)	5.77(5)	5.81(5)	5.299(7)	-4.2859(5)
	0.90	6.59(6)	6.34(6)	6.34(6)	6.36(6)	8.58(1)	-4.6844(7)
2.0	0.10	0.798	0.696	0.696	0.637	1.005(2)	-0.5252(2)
	0.20	1.559(8)	1.378(7)	1.378(7)	1.284(6)	1.063(3)	-1.0375(3)
	0.30	2.30(2)	2.07(1)	2.07(1)	1.96(1)	1.193(4)	-1.5500(4)
	0.40	3.04(2)	2.78(2)	2.78(2)	2.68(2)	1.425(3)	-2.0756(5)
	0.50	3.79(3)	3.53(3)	3.53(3)	3.45(3)	1.853(5)	-2.6237(4)
	0.60	4.55(4)	4.29(4)	4.29(4)	4.25(4)	2.603(5)	-3.1872(4)
	0.70	5.28(5)	5.06(4)	5.06(4)	5.03(4)	3.866(5)	-3.7356(5)
	0.80	5.95(5)	5.74(5)	5.74(5)	5.74(5)	5.907(8)	-4.2323(6)
	0.90	6.58(6)	6.22(6)	6.22(6)	6.41(6)	9.11(1)	-4.6431(7)

Table 15.

As in Table 13 for $x_1 = 0.75$.

T^*	ρ^*	N_{11}	N_{12}	N_{21}	N_{22}	Z	$U^E/N\varepsilon_1$
1.25	0.10	1.611(1)	0.416	1.248(1)	0.357	0.746(3)	-0.8471(5)
	0.20	3.01(2)	0.782(4)	2.35(1)	0.695(4)	0.594(4)	-1.588(2)
	0.30	4.14(3)	1.112(8)	3.34(2)	1.029(7)	0.519(5)	-2.208(2)
	0.40	5.12(4)	1.44(1)	4.30(3)	1.38(1)	0.522(5)	-2.768(2)
	0.50	6.06(5)	1.79(2)	5.36(4)	1.76(2)	0.660(5)	-3.331(1)
	0.60	7.09(6)	2.17(2)	6.51(6)	2.18(2)	1.120(6)	-3.9463(8)
	0.70	8.17(7)	2.54(2)	7.63(7)	2.64(3)	2.232(6)	-4.5772(6)
	0.80	9.11(8)	2.90(3)	8.69(8)	2.99(3)	4.340(8)	-5.1402(8)
	0.90	9.93(9)	3.13(3)	9.39(9)	3.38(3)	7.71(1)	-5.5960(8)
1.50	0.10	1.389(1)	0.381	1.144(1)	0.338	0.851(3)	-0.7442(3)
	0.20	2.63(1)	0.732(4)	2.20(1)	0.665(4)	0.776(3)	-1.4144(9)
	0.30	3.73(3)	1.065(7)	3.20(2)	0.997(7)	0.751(4)	-2.026(1)
	0.40	4.78(4)	1.41(1)	4.21(3)	1.36(1)	0.827(4)	-2.624(1)
	0.50	5.82(5)	1.77(1)	5.31(4)	1.75(1)	1.069(5)	-3.2300(8)
	0.60	6.93(6)	2.15(2)	6.44(5)	2.18(2)	1.639(6)	-3.8743(6)
	0.70	8.00(7)	2.55(2)	7.66(7)	2.54(2)	2.798(6)	-4.5119(5)
	0.80	9.00(8)	2.88(3)	8.63(8)	2.96(3)	4.887(7)	-5.0854(7)
	0.90	9.75(9)	3.20(3)	9.60(9)	3.12(3)	8.18(1)	-5.5487(8)
2.0	0.10	1.190	0.346	1.038(1)	0.317	0.959(2)	-0.6493(2)
	0.20	2.31(1)	0.681(3)	2.04(1)	0.636(3)	0.973(3)	-1.2675(4)
	0.30	3.39(2)	1.021(7)	3.06(2)	0.972(7)	1.055(4)	-1.8733(5)
	0.40	4.48(3)	1.37(1)	4.10(3)	1.34(1)	1.232(4)	-2.4877(6)
	0.50	5.59(5)	1.74(1)	5.22(4)	1.73(1)	1.595(5)	-3.1268(5)
	0.60	6.74(6)	2.12(2)	6.37(5)	2.16(2)	2.292(6)	-3.7872(5)
	0.70	7.84(7)	2.51(2)	7.54(7)	2.55(2)	3.530(6)	-4.4334(5)
	0.80	8.84(8)	2.87(3)	8.60(8)	2.90(3)	5.579(7)	-5.0162(6)
	0.90	9.62(9)	3.19(3)	9.57(9)	3.05(3)	8.81(1)	-5.4904(8)

Table 16.

Simulation data for the thermodynamic properties of square-well mixtures with potential depth ratio $\varepsilon_2/\varepsilon_1 = 0.5$, diameter ratio $\sigma_2/\sigma_1 = 2/3$ and mole fraction $x_1 = 0.25$. The numbers in parentheses are the statistical errors in the last decimal figure.

T^*	ρ^*	N_{11}	N_{12}	N_{21}	N_{22}	Z	$U^E/N\varepsilon_1$
1.25	0.10	1.087(3)	1.540(1)	0.513	0.690	0.891(2)	-0.5374(4)
	0.20	1.97(1)	2.94(2)	0.979(5)	1.368(7)	0.831(3)	-1.022(1)
	0.30	2.66(2)	4.25(3)	1.42(1)	2.05(1)	0.841(4)	-1.468(1)
	0.40	3.25(3)	5.53(4)	1.84(1)	2.76(2)	0.930(4)	-1.9005(9)
	0.50	3.83(3)	6.87(6)	2.29(2)	3.51(3)	1.160(5)	-2.3530(6)
	0.60	4.47(4)	8.28(7)	2.76(2)	4.33(4)	1.690(5)	-2.8338(4)
	0.70	5.06(5)	9.72(8)	3.24(3)	5.15(4)	2.728(5)	-3.3172(5)
	0.80	5.67(5)	11.0(1)	3.65(3)	5.95(5)	4.564(7)	-3.7599(7)
	0.90	6.08(6)	12.1(1)	4.04(4)	6.59(6)	7.473(9)	-4.1360(8)
	1.00	6.53(6)	12.9(1)	4.29(4)	7.17(7)	11.99(2)	-4.437(1)
1.50	0.10	0.950(2)	1.414(1)	0.471	0.651	0.950(2)	-0.4908(3)
	0.20	1.76(1)	2.75(1)	0.915(5)	1.307(7)	0.953(3)	-0.9504(5)
	0.30	2.46(2)	4.04(3)	1.345(9)	1.98(1)	1.019(3)	-1.3921(7)
	0.40	3.10(3)	5.34(4)	1.78(1)	2.70(2)	1.165(4)	-1.8378(5)
	0.50	3.75(3)	6.72(5)	2.24(2)	3.47(3)	1.481(5)	-2.3057(5)
	0.60	4.42(4)	8.12(7)	2.71(2)	4.29(4)	2.085(5)	-2.7915(4)
	0.70	5.01(5)	9.57(8)	3.19(3)	5.12(4)	3.157(5)	-3.2772(4)
	0.80	5.57(5)	10.9(1)	3.62(3)	5.89(5)	4.995(6)	-3.7236(6)
	0.90	6.08(6)	11.9(1)	3.97(4)	6.60(6)	7.878(8)	-4.1022(8)
	1.00	6.43(6)	12.9(1)	4.29(4)	7.10(7)	12.34(2)	-4.412(1)
2.0	0.10	0.824(1)	1.282	0.427	0.609	1.027(2)	-0.4437(2)
	0.20	1.577(9)	2.54(1)	0.848(4)	1.240(6)	1.102(3)	-0.8791(4)
	0.30	2.28(2)	3.82(3)	1.274(9)	1.91(1)	1.241(4)	-1.3183(4)
	0.40	2.96(2)	5.15(4)	1.72(1)	2.63(2)	1.474(4)	-1.7725(4)
	0.50	3.63(3)	6.55(5)	2.18(2)	3.40(3)	1.881(4)	-2.2489(4)
	0.60	4.32(4)	7.97(7)	2.66(2)	4.23(3)	2.570(5)	-2.7411(3)
	0.70	4.95(4)	9.39(8)	3.13(3)	5.06(4)	3.724(6)	-3.2284(4)
	0.80	5.54(5)	10.6(1)	3.55(3)	5.88(5)	5.541(7)	-3.6762(6)
	0.90	5.92(6)	11.9(1)	3.96(4)	6.52(6)	8.410(9)	-4.0631(8)
	1.00	6.47(6)	12.4(1)	4.13(4)	7.25(7)	12.76(2)	-4.361(1)

Table 17.

As in Table 16 for $x_1 = 0.50$.

T^*	ρ^*	N_{11}	N_{12}	N_{21}	N_{22}	Z	$U^E/N\varepsilon_1$
1.25	0.10	1.631(3)	0.757	0.757	0.337	0.805(2)	-0.7174(8)
	0.20	2.98(2)	1.453(8)	1.453(8)	0.671(3)	0.685(3)	-1.342(2)
	0.30	4.02(3)	2.10(2)	2.10(2)	1.007(7)	0.643(4)	-1.874(2)
	0.40	4.93(4)	2.75(2)	2.75(2)	1.36(1)	0.660(4)	-2.374(2)
	0.50	5.84(5)	3.44(3)	3.44(3)	1.73(1)	0.806(4)	-2.891(1)
	0.60	6.85(6)	4.16(4)	4.16(4)	2.14(2)	1.233(5)	-3.4521(6)
	0.70	7.87(7)	4.93(4)	4.93(4)	2.54(2)	2.232(6)	-4.0267(6)
	0.80	8.79(8)	5.62(5)	5.62(5)	2.93(3)	4.074(7)	-4.5502(7)
	0.90	9.54(9)	6.18(6)	6.18(6)	3.30(3)	7.07(1)	-4.9828(9)
	1.00	10.1(1)	6.66(6)	6.66(6)	3.57(4)	11.71(2)	-5.333(1)
1.50	0.10	1.407(1)	0.692	0.692	0.317	0.884(2)	-0.6359(4)
	0.20	2.62(2)	1.3480	1.348(7)	0.637(3)	0.833(3)	-1.2124(9)
	0.30	3.68(3)	1.9910	1.99(1)	0.970(6)	0.844(4)	-1.746(1)
	0.40	4.67(4)	2.6500	2.65(2)	1.32(1)	0.933(4)	-2.2687(9)
	0.50	5.68(5)	3.3500	3.35(3)	1.70(1)	1.173(5)	-2.8161(7)
	0.60	6.72(6)	4.0940	4.09(3)	2.11(2)	1.705(5)	-3.3915(5)
	0.70	7.78(7)	4.8370	4.84(4)	2.54(2)	2.755(6)	-3.9711(6)
	0.80	8.70(8)	5.5330	5.53(5)	2.94(3)	4.616(6)	-4.4978(7)
	0.90	9.48(9)	6.0850	6.09(6)	3.34(3)	7.56(1)	-4.9379(9)
	1.00	10.1(1)	6.5910	6.59(6)	3.59(4)	12.17(2)	-5.295(1)
2.0	0.10	1.208(1)	0.625	0.625	0.296	0.984(2)	-0.5600(2)
	0.20	2.32(1)	1.245(6)	1.245(6)	0.604(3)	1.014(3)	-1.0953(4)
	0.30	3.38(2)	1.88(1)	1.88(1)	0.933(6)	1.107(4)	-1.6258(6)
	0.40	4.41(3)	2.55(2)	2.55(2)	1.288(9)	1.296(4)	-2.1651(5)
	0.50	5.49(4)	3.25(3)	3.25(3)	1.68(1)	1.652(5)	-2.7312(5)
	0.60	6.58(6)	4.00(3)	4.00(3)	2.10(2)	2.294(5)	-3.3191(4)
	0.70	7.64(7)	4.75(4)	4.75(4)	2.52(2)	3.415(6)	-3.9012(5)
	0.80	8.58(8)	5.44(5)	5.44(5)	2.94(3)	5.248(8)	-4.4336(7)
	0.90	9.34(9)	6.04(6)	6.04(6)	3.29(3)	8.184(9)	-4.8837(8)
	1.00	9.94(9)	6.49(6)	6.49(6)	3.65(4)	12.61(2)	-5.237(1)

Table 18.

As in Table 16 for $x_1 = 0.75$.

T^*	ρ^*	N_{11}	N_{12}	N_{21}	N_{22}	z	$U^E/N\varepsilon_1$
1.25	0.10	1.952(3)	0.300	0.899(1)	0.133	0.732(2)	-0.899(1)
	0.20	3.59(2)	0.578(3)	1.734(9)	0.266(1)	0.555(4)	-1.669(3)
	0.30	4.88(4)	0.838(6)	2.51(2)	0.400(3)	0.468(4)	-2.298(3)
	0.40	5.95(5)	1.096(8)	3.29(3)	0.535(4)	0.428(5)	-2.845(2)
	0.50	7.05(6)	1.37(1)	4.11(3)	0.686(6)	0.513(5)	-3.415(1)
	0.60	8.30(7)	1.67(1)	5.01(4)	0.842(8)	0.886(6)	-4.0485(7)
	0.70	9.59(8)	1.97(2)	5.92(5)	1.01(1)	1.896(6)	-4.7063(5)
	0.80	10.7(1)	2.25(2)	6.76(6)	1.17(1)	3.873(7)	-5.2983(6)
	0.90	11.7(1)	2.50(2)	7.50(7)	1.27(2)	7.08(1)	-5.7790(8)
	1.00	12.4(1)	2.68(3)	8.05(8)	1.43(2)	11.96(2)	-6.154(1)
1.50	0.10	1.674(1)	0.273	0.819	0.125	0.835(2)	-0.7803(5)
	0.20	3.13(2)	0.534(3)	1.601(8)	0.252(1)	0.734(3)	-1.471(1)
	0.30	4.40(3)	0.791(5)	2.37(2)	0.383(3)	0.698(4)	-2.095(1)
	0.40	5.61(4)	1.055(8)	3.17(2)	0.522(4)	0.741(5)	-2.694(1)
	0.50	6.84(6)	1.34(1)	4.01(3)	0.671(6)	0.926(5)	-3.314(1)
	0.60	8.14(7)	1.63(1)	4.90(4)	0.840(8)	1.423(6)	-3.9720(6)
	0.70	9.46(8)	1.94(2)	5.83(5)	1.01(1)	2.496(6)	-4.6390(6)
	0.80	10.6(1)	2.22(2)	6.67(6)	1.18(1)	4.455(7)	-5.2348(7)
	0.90	11.6(1)	2.47(2)	7.39(7)	1.32(2)	7.60(1)	-5.7264(8)
	1.00	12.3(1)	2.66(3)	7.97(8)	1.47(2)	12.46(2)	-6.106(1)
2.0	0.10	1.432(1)	0.246	0.739	0.117	0.948(2)	-0.6749(2)
	0.20	2.76(1)	0.492(2)	1.476(7)	0.238(1)	0.937(3)	-1.3102(5)
	0.30	4.03(3)	0.744(5)	2.23(2)	0.367(2)	0.999(3)	-1.9273(8)
	0.40	5.29(4)	1.010(7)	3.03(2)	0.507(4)	1.152(4)	-2.5522(7)
	0.50	6.60(5)	1.29(1)	3.88(3)	0.664(6)	1.467(4)	-3.2029(5)
	0.60	7.95(7)	1.60(1)	4.80(4)	0.823(7)	2.103(5)	-3.8810(4)
	0.70	9.27(8)	1.91(2)	5.72(5)	1.00(1)	3.248(5)	-4.5516(5)
	0.80	10.46(9)	2.19(2)	6.57(6)	1.18(1)	5.188(7)	-5.1588(7)
	0.90	11.4(1)	2.44(2)	7.33(7)	1.32(2)	8.23(1)	-5.6618(7)
	1.00	12.2(1)	2.63(3)	7.89(7)	1.49(2)	12.97(2)	-6.050(1)

Table 19.

Simulation data for the thermodynamic properties of square-well mixtures with potential depth ratio $\varepsilon_2/\varepsilon_1 = 0.5$, diameter ratio $\sigma_2/\sigma_1 = 1/2$ and mole fraction $x_1 = 0.25$. The numbers in parentheses are the statistical errors in the last decimal figure.

T^*	ρ^*	N_{11}	N_{12}	N_{21}	N_{22}	z	$U^E/N\varepsilon_1$
1.25	0.10	1.513(4)	1.578(1)	0.526	0.408	0.866(2)	-0.5446(6)
	0.20	2.69(2)	3.06(2)	1.019(5)	0.820(4)	0.789(3)	-1.030(2)
	0.30	3.62(3)	4.46(3)	1.49(1)	1.241(8)	0.766(3)	-1.473(2)
	0.40	4.42(4)	5.83(5)	1.95(2)	1.68(1)	0.796(4)	-1.898(1)
	0.50	5.23(5)	7.27(6)	2.42(2)	2.14(2)	0.914(4)	-2.3409(8)
	0.60	6.16(5)	8.82(7)	2.94(2)	2.64(2)	1.249(6)	-2.8238(7)
	0.70	7.17(6)	10.37(9)	3.46(3)	3.17(3)	2.011(6)	-3.3232(9)
	0.80	8.14(7)	11.8(1)	3.95(4)	3.68(3)	3.385(7)	-3.802(1)
	0.90	9.06(8)	13.1(1)	4.35(4)	4.20(4)	5.64(1)	-4.229(1)
	1.00	9.99(9)	14.2(1)	4.73(4)	4.63(4)	9.06(2)	-4.627(1)
1.50	0.10	1.308(2)	1.437(1)	0.479	0.383	0.934(2)	-0.4895(3)
	0.20	2.40(1)	2.83(1)	0.942(5)	0.778(4)	0.913(3)	-0.9453(8)
	0.30	3.34(3)	4.19(3)	1.396(9)	1.189(8)	0.931(4)	-1.3801(9)
	0.40	4.19(3)	5.58(4)	1.86(1)	1.63(1)	1.021(4)	-1.8155(8)
	0.50	5.09(4)	7.06(6)	2.35(2)	2.10(2)	1.226(4)	-2.2772(6)
	0.60	6.07(5)	8.61(7)	2.87(2)	2.61(2)	1.652(5)	-2.7681(6)
	0.70	7.06(6)	10.18(9)	3.39(3)	3.14(3)	2.483(6)	-3.2691(9)
	0.80	8.01(7)	11.6(1)	3.88(3)	3.68(3)	3.887(6)	-3.747(1)
	0.90	8.92(8)	12.9(1)	4.32(4)	4.18(4)	6.132(9)	-4.187(1)
	1.00	9.84(9)	13.9(1)	4.65(4)	4.68(4)	9.61(2)	-4.573(1)
2.0	0.10	1.124(2)	1.296	0.432	0.357	1.007(2)	-0.4364(2)
	0.20	2.14(1)	2.59(1)	0.864(4)	0.733(4)	1.052(2)	-0.8627(4)
	0.30	3.08(2)	3.92(3)	1.307(9)	1.136(7)	1.150(3)	-1.2907(5)
	0.40	4.00(3)	5.32(4)	1.77(1)	1.57(1)	1.319(4)	-1.7345(5)
	0.50	4.96(4)	6.79(5)	2.26(2)	2.05(2)	1.626(4)	-2.2044(4)
	0.60	5.96(5)	8.32(7)	2.78(2)	2.57(2)	2.152(5)	-2.6985(6)
	0.70	6.93(6)	9.91(8)	3.30(3)	3.11(3)	3.049(5)	-3.2012(8)
	0.80	7.87(7)	11.4(1)	3.79(3)	3.66(3)	4.507(6)	-3.6807(9)
	0.90	8.76(8)	12.6(1)	4.21(4)	4.22(4)	6.766(9)	-4.117(1)
	1.00	9.67(9)	13.7(1)	4.56(4)	4.72(4)	10.22(1)	-4.511(2)

Table 20.

As in Table 19 for $x_1 = 0.50$.

T^*	ρ^*	N_{11}	N_{12}	N_{21}	N_{22}	z	$U^E/N\varepsilon_1$
1.25	0.10	1.885(4)	0.652	0.652	0.167	0.790(3)	-0.7229(9)
	0.20	3.46(2)	1.282(7)	1.282(7)	0.340(2)	0.652(3)	-1.360(2)
	0.30	4.64(4)	1.88(1)	1.88(1)	0.514(3)	0.581(4)	-1.888(2)
	0.40	5.69(5)	2.47(2)	2.47(2)	0.695(5)	0.555(4)	-2.381(2)
	0.50	6.75(6)	3.08(3)	3.08(3)	0.884(7)	0.616(5)	-2.886(1)
	0.60	7.97(7)	3.73(3)	3.73(3)	1.089(9)	0.922(5)	-3.4458(7)
	0.70	9.25(8)	4.40(4)	4.40(4)	1.30(1)	1.738(6)	-4.0314(7)
	0.80	10.41(9)	5.03(4)	5.03(4)	1.52(1)	3.289(7)	-4.5720(9)
	0.90	11.4(1)	5.60(5)	5.60(5)	1.73(2)	5.82(1)	-5.040(1)
	1.00	12.2(1)	6.08(6)	6.08(6)	1.93(2)	9.69(2)	-5.447(2)
1.50	0.10	1.624(2)	0.592	0.592	0.157	0.873(2)	-0.6351(5)
	0.20	3.02(2)	1.173(6)	1.173(6)	0.32(2)	0.805(3)	-1.210(1)
	0.30	4.23(3)	1.75(1)	1.75(1)	0.49(3)	0.788(3)	-1.738(1)
	0.40	5.38(4)	2.34(2)	2.34(2)	0.671(5)	0.838(4)	-2.257(1)
	0.50	6.56(5)	2.97(2)	2.97(2)	0.864(7)	0.993(4)	-2.7964(9)
	0.60	7.82(7)	3.64(3)	3.64(3)	1.071(9)	1.398(6)	-3.3741(6)
	0.70	9.11(8)	4.32(4)	4.32(4)	1.29(1)	2.261(5)	-3.9641(6)
	0.80	10.27(9)	4.96(4)	4.96(4)	1.52(1)	3.827(6)	-4.5107(8)
	0.90	11.3(1)	5.53(5)	5.53(5)	1.74(2)	6.354(9)	-4.986(1)
	1.00	12.1(1)	5.99(6)	5.99(6)	1.99(2)	10.24(2)	-5.393(2)
2.0	0.10	1.390(1)	0.532	0.532	0.146	0.972(2)	-0.5539(2)
	0.20	2.67(1)	1.070(5)	1.070(5)	0.300(1)	0.985(3)	-1.0836(6)
	0.30	3.88(3)	1.63(1)	1.63(1)	0.466(3)	1.045(3)	-1.6044(7)
	0.40	5.09(4)	2.22(2)	2.22(2)	0.646(5)	1.193(4)	-2.1376(6)
	0.50	6.34(5)	2.85(2)	2.85(2)	0.844(7)	1.465(4)	-2.6968(5)
	0.60	7.64(6)	3.52(3)	3.52(3)	1.056(9)	1.988(5)	-3.2862(4)
	0.70	8.92(8)	4.21(4)	4.21(4)	1.28(1)	2.943(6)	-3.8789(7)
	0.80	10.10(9)	4.85(4)	4.85(4)	1.53(1)	4.515(6)	-4.4302(8)
	0.90	11.1(1)	5.43(5)	5.43(5)	1.77(2)	7.002(9)	-4.916(1)
	1.00	11.9(1)	5.95(6)	5.95(6)	1.97(2)	10.84(2)	-5.330(1)

Table 21.

As in Table 19 for $x_1 = 0.75$.

T^*	ρ^*	N_{11}	N_{12}	N_{21}	N_{22}	z	$U^E/N\varepsilon_1$
1.25	0.10	2.058(3)	0.237	0.711(1)	0.060	0.718(2)	-0.901(1)
	0.20	3.82(2)	0.468(2)	1.403(7)	0.1230(1)	0.542(4)	-1.687(3)
	0.30	5.17(4)	0.689(5)	2.07(1)	0.186(1)	0.445(4)	-2.316(3)
	0.40	6.32(5)	0.906(7)	2.72(2)	0.253(2)	0.386(5)	-2.865(3)
	0.50	7.47(6)	1.124(9)	3.37(3)	0.319(3)	0.429(5)	-3.416(2)
	0.60	8.79(8)	1.36(1)	4.09(3)	0.394(4)	0.741(5)	-4.0443(7)
	0.70	10.20(9)	1.61(1)	4.82(4)	0.471(5)	1.645(6)	-4.7047(7)
	0.80	11.5(1)	1.84(2)	5.51(5)	0.551(6)	3.488(8)	-5.3056(8)
	0.90	12.5(1)	2.04(2)	6.13(6)	0.651(7)	6.436(9)	-5.7990(8)
	1.00	13.3(1)	2.23(2)	6.69(6)	0.72(1)	10.98(1)	-6.201(1)
1.50	0.10	1.767(1)	0.214	0.642	0.057	0.821(2)	-0.7797(5)
	0.20	3.31(2)	0.426(2)	1.278(6)	0.116(1)	0.716(3)	-1.474(1)
	0.30	4.65(3)	0.636(4)	1.91(1)	0.177(1)	0.669(3)	-2.092(2)
	0.40	5.92(5)	0.854(6)	2.56(2)	0.242(2)	0.695(4)	-2.686(1)
	0.50	7.22(6)	1.084(9)	3.25(3)	0.313(3)	0.838(5)	-3.303(1)
	0.60	8.63(7)	1.33(1)	3.98(3)	0.388(4)	1.288(6)	-3.9630(5)
	0.70	10.04(9)	1.58(1)	4.73(4)	0.467(5)	2.256(6)	-4.6307(6)
	0.80	11.3(1)	1.81(2)	5.44(5)	0.553(6)	4.070(6)	-5.239(8)
	0.90	12.3(1)	2.03(2)	6.08(6)	0.632(8)	7.01(1)	-5.744(8)
	1.00	13.2(1)	2.21(2)	6.64(6)	0.73(1)	11.47(2)	-6.152(1)
2.0	0.10	1.509(1)	0.192	0.576	0.052	0.944(2)	-0.6709(2)
	0.20	2.91(2)	0.387(2)	1.162(6)	0.108(1)	0.929(3)	-1.3018(6)
	0.30	4.25(3)	0.591(4)	1.77(1)	0.168(1)	0.976(3)	-1.9167(7)
	0.40	5.58(4)	0.807(6)	2.42(2)	0.234(2)	1.101(4)	-2.5349(7)
	0.50	6.97(6)	1.038(8)	3.11(2)	0.304(3)	1.388(4)	-3.1842(6)
	0.60	8.42(7)	1.28(1)	3.85(3)	0.383(3)	1.947(6)	-3.8617(4)
	0.70	9.85(8)	1.54(1)	4.61(4)	0.466(4)	3.011(6)	-4.5370(5)
	0.80	11.1(1)	1.77(2)	5.32(5)	0.563(6)	4.821(7)	-5.1515(9)
	0.90	12.2(1)	2.00(2)	5.99(5)	0.646(8)	7.67(1)	-5.6719(9)
	1.00	13.0(1)	2.18(2)	6.55(6)	0.752(9)	12.05(2)	-6.088(1)

Table 22.

Simulation data for the thermodynamic properties of square-well mixtures with potential depth ratio $\varepsilon_2/\varepsilon_1 = 0.5$, diameter ratio $\sigma_2/\sigma_1 = 1/3$ and mole fraction $x_1 = 0.25$. The numbers in parentheses are the statistical errors in the last decimal figure.

T^*	ρ^*	N_{11}	N_{12}	N_{21}	N_{22}	Z	$U^E/N\varepsilon_1$
1.25	0.10	1.916(6)	1.428(1)	0.476	0.155	0.859(2)	-0.5211(9)
	0.20	3.53(2)	2.87(1)	0.957(5)	0.323(2)	0.750(3)	-1.009(2)
	0.30	4.78(4)	4.26(3)	1.42(1)	0.500(3)	0.681(3)	-1.443(3)
	0.40	5.84(5)	5.59(4)	1.86(1)	0.682(5)	0.632(4)	-1.846(2)
	0.50	6.98(6)	6.93(6)	2.31(2)	0.874(7)	0.634(5)	-2.261(2)
	0.60	8.28(7)	8.35(7)	2.78(2)	1.084(9)	0.754(6)	-2.714(8)
	0.70	9.71(8)	9.85(8)	3.28(3)	1.31(1)	1.190(6)	-3.200(1)
	0.80	11.0(1)	11.3(1)	3.77(3)	1.57(1)	2.122(6)	-3.667(1)
	0.90	12.1(1)	12.6(1)	4.21(4)	1.86(2)	3.654(8)	-4.094(1)
	1.00	13.1(1)	13.9(1)	4.63(4)	2.17(2)	6.11(1)	-4.502(1)
1.50	0.10	1.645(4)	1.288(1)	0.429	0.144	0.920(2)	-0.4604(5)
	0.20	3.04(2)	2.59(1)	0.863(4)	0.300(1)	0.866(3)	-0.8939(9)
	0.30	4.28(3)	3.90(3)	1.299(9)	0.465(3)	0.847(3)	-1.312(1)
	0.40	5.46(4)	5.23(4)	1.74(1)	0.643(5)	0.844(4)	-1.727(1)
	0.50	6.70(6)	6.62(5)	2.21(2)	0.836(6)	0.927(4)	-2.1635(9)
	0.60	8.08(7)	8.08(7)	2.69(2)	1.046(8)	1.143(5)	-2.6356(8)
	0.70	9.51(8)	9.59(8)	3.20(3)	1.28(1)	1.652(6)	-3.1243(9)
	0.80	10.8(1)	11.1(1)	3.69(3)	1.54(1)	2.605(6)	-3.599(1)
	0.90	11.9(1)	12.5(1)	4.15(4)	1.83(2)	4.181(7)	-4.038(1)
	1.00	12.9(1)	13.7(1)	4.57(4)	2.15(2)	6.67(2)	-4.445(2)
2.0	0.10	1.404(2)	1.148	0.383	0.133	0.991(2)	-0.4035(2)
	0.20	2.69(2)	2.33(1)	0.778(4)	0.277(1)	1.005(2)	-0.8006(5)
	0.30	3.91(3)	3.57(2)	1.190(8)	0.434(3)	1.045(3)	-1.2007(6)
	0.40	5.15(4)	4.87(4)	1.63(1)	0.606(4)	1.135(4)	-1.6191(5)
	0.50	6.45(5)	6.27(5)	2.09(2)	0.796(6)	1.316(4)	-2.0643(6)
	0.60	7.85(7)	7.75(6)	2.59(2)	1.009(8)	1.630(5)	-2.5408(7)
	0.70	9.26(8)	9.28(8)	3.09(3)	1.25(1)	2.229(6)	-3.031(1)
	0.80	10.58(9)	10.77(9)	3.59(3)	1.51(1)	3.214(6)	-3.510(1)
	0.90	11.7(1)	12.2(1)	4.06(4)	1.80(2)	4.809(8)	-3.959(1)
	1.00	12.8(1)	13.5(1)	4.49(4)	2.12(2)	7.29(1)	-4.370(2)

Table 23.

As in Table 22 for $x_1 = 0.50$.

T^*	ρ^*	N_{11}	N_{12}	N_{21}	N_{22}	Z	$U^E/N\varepsilon_1$
1.25	0.10	2.077(4)	0.515	0.515	0.056	0.788(2)	-0.708(1)
	0.20	3.86(2)	1.046(5)	1.046(5)	0.117(1)	0.636(3)	-1.350(3)
	0.30	5.23(4)	1.56(1)	1.56(1)	0.182(1)	0.538(4)	-1.881(3)
	0.40	6.37(5)	2.04(2)	2.04(2)	0.249(2)	0.480(5)	-2.346(3)
	0.50	7.56(6)	2.53(2)	2.53(2)	0.319(3)	0.487(6)	-2.825(2)
	0.60	8.92(8)	3.04(3)	3.04(3)	0.396(3)	0.656(6)	-3.3553(7)
	0.70	10.38(9)	3.58(3)	3.58(3)	0.481(4)	1.290(6)	-3.9187(8)
	0.80	11.7(1)	4.11(4)	4.11(4)	0.577(5)	2.567(6)	-4.444(1)
	0.90	12.7(1)	4.62(4)	4.62(4)	0.681(6)	4.697(9)	-4.903(1)
	1.00	13.6(1)	5.08(5)	5.08(5)	0.809(8)	7.96(2)	-5.300(1)
1.50	0.10	1.776(2)	0.463	0.463	0.052	0.873(2)	-0.6142(6)
	0.20	3.32(2)	0.937(5)	0.937(5)	0.108(1)	0.780(3)	-1.175(1)
	0.30	4.68(3)	1.417(9)	1.417(9)	0.168(1)	0.741(3)	-1.691(2)
	0.40	5.96(5)	1.90(1)	1.90(1)	0.232(2)	0.735(4)	-2.191(1)
	0.50	7.29(6)	2.41(2)	2.41(2)	0.302(2)	0.840(4)	-2.7118(8)
	0.60	8.73(7)	2.94(2)	2.94(2)	0.379(3)	1.115(5)	-3.2685(6)
	0.70	10.21(9)	3.49(3)	3.49(3)	0.463(4)	1.792(6)	-3.8428(8)
	0.80	11.5(1)	4.03(4)	4.03(4)	0.564(5)	3.106(6)	-4.3765(8)
	0.90	12.6(1)	4.55(4)	4.55(4)	0.668(6)	5.229(7)	-4.8442(9)
	1.00	13.5(1)	5.03(5)	5.03(5)	0.796(8)	8.45(1)	-5.249(1)
2.0	0.10	1.515(1)	0.412	0.412	0.047	0.963(2)	-0.5305(2)
	0.20	2.91(2)	0.841(4)	0.841(4)	0.099	0.959(2)	-1.0385(5)
	0.30	4.25(3)	1.292(8)	1.292(8)	0.156(1)	0.988(3)	-1.5397(7)
	0.40	5.61(4)	1.77(1)	1.77(1)	0.218(2)	1.080(4)	-2.0544(7)
	0.50	7.02(6)	2.28(2)	2.28(2)	0.286(2)	1.290(5)	-2.5949(5)
	0.60	8.50(7)	2.82(2)	2.82(2)	0.364(3)	1.695(5)	-3.1663(5)
	0.70	9.99(9)	3.38(3)	3.38(3)	0.451(4)	2.458(6)	-3.7460(6)
	0.80	11.3(1)	3.93(3)	3.93(3)	0.549(5)	3.782(6)	-4.2860(9)
	0.90	12.4(1)	4.46(4)	4.46(4)	0.658(6)	5.863(9)	-4.769(1)
	1.00	13.3(1)	4.93(5)	4.93(5)	0.789(7)	9.08(1)	-5.177(1)

Table 24.

As in Table 22 for $x_1 = 0.75$.

T^*	ρ^*	N_{11}	N_{12}	N_{21}	N_{22}	Z	$U^E/N\varepsilon_1$
1.25	0.10	2.134(3)	0.177	0.530	0.019	0.716(3)	-0.895(1)
	0.20	3.97(2)	0.359(2)	1.078(5)	0.040	0.533(3)	-1.682(4)
	0.30	5.40(4)	0.537(4)	1.61(1)	0.062	0.418(4)	-2.313(4)
	0.40	6.58(6)	0.706(5)	2.12(2)	0.086(1)	0.360(5)	-2.846(3)
	0.50	7.76(7)	0.872(7)	2.62(2)	0.111(1)	0.368(5)	-3.381(2)
	0.60	9.15(8)	1.046(9)	3.14(3)	0.138(1)	0.619(6)	-3.9941(7)
	0.70	10.61(9)	1.23(1)	3.69(3)	0.166(2)	1.450(6)	-4.6429(7)
	0.80	11.9(1)	1.41(1)	4.24(4)	0.198(2)	3.145(7)	-5.2326(7)
	0.90	13.0(1)	1.59(1)	4.77(4)	0.234(3)	5.925(9)	-5.7226(9)
	1.00	13.8(1)	1.75(2)	5.26(5)	0.279(4)	10.17(2)	-6.118(1)
1.50	0.10	1.821(1)	0.159	0.476	0.018	0.826(2)	-0.7681(5)
	0.20	3.43(2)	0.322(2)	0.966(5)	0.037	0.705(3)	-1.458(2)
	0.30	4.82(4)	0.486(3)	1.46(1)	0.058	0.651(4)	-2.068(2)
	0.40	6.13(5)	0.654(5)	1.96(2)	0.080(1)	0.651(3)	-2.651(2)
	0.50	7.50(6)	0.829(7)	2.49(2)	0.105(1)	0.775(5)	-3.2571(9)
	0.60	8.96(8)	1.011(8)	3.03(3)	0.130(1)	1.152(6)	-3.9049(5)
	0.70	10.45(9)	1.20(1)	3.60(3)	0.159(2)	2.051(6)	-4.5645(6)
	0.80	11.8(1)	1.39(1)	4.16(4)	0.194(2)	3.739(7)	-5.1637(8)
	0.90	12.9(1)	1.57(1)	4.70(4)	0.233(3)	6.463(9)	-5.6648(9)
	1.00	13.7(1)	1.73(2)	5.20(5)	0.270(4)	10.62(2)	-6.065(1)
2.0	0.10	1.556(1)	0.141	0.424	0.016	0.936(2)	-0.6596(2)
	0.20	3.00(2)	0.288(1)	0.865(4)	0.034	0.915(3)	-1.2808(7)
	0.30	4.39(3)	0.443(3)	1.329(9)	0.053	0.949(4)	-1.8827(8)
	0.40	5.77(4)	0.607(4)	1.82(1)	0.075(1)	1.056(4)	-2.4915(7)
	0.50	7.23(6)	0.782(6)	2.35(2)	0.098(1)	1.302(4)	-3.1302(5)
	0.60	8.74(7)	0.967(8)	2.90(2)	0.125(1)	1.810(5)	-3.7989(5)
	0.70	10.24(9)	1.16(1)	3.48(3)	0.154(1)	2.795(6)	-4.4658(6)
	0.80	11.6(1)	1.35(1)	4.05(4)	0.189(2)	4.485(6)	-5.0746(8)
	0.90	12.7(1)	1.54(1)	4.61(4)	0.228(3)	7.14(1)	-5.5902(9)
	1.00	13.5(1)	1.71(2)	5.12(5)	0.274(4)	11.25(1)	-5.998(1)

Table 25.

Simulation data for the thermodynamic properties of square-well mixtures with potential depth ratio $\varepsilon_2/\varepsilon_1 = 0.5$, diameter ratio $\sigma_2/\sigma_1 = 1/5$ and mole fraction $x_1 = 0.25$. The numbers in parentheses are the statistical errors in the last decimal figure.

T^*	ρ^*	N_{11}	N_{12}	N_{21}	N_{22}	Z	$U^E/N\varepsilon_1$
1.25	0.10	2.130(7)	1.159(1)	0.386	0.038	0.860(2)	-0.4783(9)
	0.20	4.02(3)	2.39(1)	0.795(4)	0.084	0.744(3)	-0.940(3)
	0.30	5.44(5)	3.58(2)	1.192(8)	0.135(1)	0.657(4)	-1.337(3)
	0.40	6.63(6)	4.71(4)	1.57(1)	0.191(1)	0.582(4)	-1.697(2)
	0.50	7.83(7)	5.81(5)	1.94(2)	0.251(2)	0.542(4)	-2.053(2)
	0.60	9.25(8)	6.95(6)	2.32(2)	0.317(3)	0.585(5)	-2.444(1)
	0.70	10.77(9)	8.18(7)	2.73(2)	0.395(3)	0.867(5)	-2.8659(8)
	0.80	12.1(1)	9.46(8)	3.15(3)	0.489(4)	1.533(6)	-3.2785(9)
	0.90	13.2(1)	10.7(1)	3.58(3)	0.607(5)	2.673(8)	-3.658(1)
	1.00	14.0(1)	12.0(1)	4.00(4)	0.755(6)	4.52(1)	-4.017(2)
1.50	0.10	1.803(4)	1.039	0.346	0.035	0.916(2)	-0.4157(5)
	0.20	3.39(2)	2.12(1)	0.707(3)	0.075	0.854(2)	-0.813(1)
	0.30	4.80(4)	3.23(2)	1.075(7)	0.120(1)	0.806(3)	-1.192(1)
	0.40	6.11(5)	4.34(3)	1.45(1)	0.171(1)	0.780(4)	-1.562(1)
	0.50	7.50(6)	5.48(4)	1.83(2)	0.227(2)	0.795(4)	-1.9490(9)
	0.60	9.02(8)	6.68(6)	2.23(2)	0.291(2)	0.914(4)	-2.3638(7)
	0.70	10.57(9)	7.94(7)	2.65(2)	0.366(3)	1.266(5)	-2.7931(8)
	0.80	11.9(1)	9.24(8)	3.08(3)	0.455(4)	1.957(5)	-3.210(1)
	0.90	13.0(1)	10.53(9)	3.51(3)	0.566(5)	3.124(6)	-3.5950(9)
	1.00	13.9(1)	11.8(1)	3.94(4)	0.708(6)	4.94(1)	-3.958(1)
2.0	0.10	1.536(2)	0.922	0.307	0.032	0.978(1)	-0.3609(2)
	0.20	2.96(2)	1.893(9)	0.631(3)	0.068	0.981(2)	-0.7178(5)
	0.30	4.33(3)	2.92(2)	0.972(6)	0.108(1)	0.991(3)	-1.0769(6)
	0.40	5.73(4)	3.99(3)	1.33(1)	0.154(1)	1.033(3)	-1.4514(6)
	0.50	7.21(6)	5.14(4)	1.71(1)	0.205(2)	1.135(4)	-1.8481(5)
	0.60	8.77(7)	6.35(5)	2.12(2)	0.266(2)	1.346(4)	-2.2691(6)
	0.70	10.32(9)	7.64(6)	2.55(2)	0.336(3)	1.758(5)	-2.7030(7)
	0.80	11.7(1)	8.95(8)	2.98(3)	0.420(3)	2.496(6)	-3.123(1)
	0.90	12.8(1)	10.25(9)	3.41(3)	0.523(4)	3.673(7)	-3.512(1)
	1.00	13.7(1)	11.5(1)	3.84(3)	0.655(5)	5.53(1)	-3.874(1)

Table 26.

As in Table 25 for $x_1 = 0.50$.

T^*	ρ^*	N_{11}	N_{12}	N_{21}	N_{22}	z	$U^E/N\varepsilon_1$
1.25	0.10	2.161(5)	0.394	0.394	0.013	0.788(3)	-0.681(1)
	0.20	4.03(3)	0.809(4)	0.809(4)	0.028	0.641(3)	-1.298(4)
	0.30	5.45(4)	1.214(8)	1.214(8)	0.046	0.538(3)	-1.798(4)
	0.40	6.66(6)	1.60(1)	1.60(1)	0.065	0.459(4)	-2.238(3)
	0.50	7.87(7)	1.98(2)	1.98(2)	0.086(1)	0.444(5)	-2.677(2)
	0.60	9.27(8)	2.36(2)	2.36(2)	0.109(1)	0.589(5)	-3.1659(8)
	0.70	10.75(9)	2.78(2)	2.78(2)	0.136(1)	1.131(6)	-3.6871(6)
	0.80	12.1(1)	3.21(3)	3.21(3)	0.169(1)	2.273(6)	-4.1721(7)
	0.90	13.1(1)	3.64(3)	3.64(3)	0.211(2)	4.176(7)	-4.5907(7)
	1.00	14.0(1)	4.07(4)	4.07(4)	0.257(2)	6.28(2)	-4.9652(8)
1.50	0.10	1.833(2)	0.353	0.353	0.012	0.873(2)	-0.5845(6)
	0.20	3.45(2)	0.721(4)	0.721(4)	0.026	0.778(2)	-1.120(1)
	0.30	4.85(4)	1.096(7)	1.096(7)	0.041	0.720(3)	-1.606(2)
	0.40	6.20(5)	1.48(1)	1.48(1)	0.058	0.711(4)	-2.079(1)
	0.50	7.57(6)	1.86(2)	1.86(2)	0.078(1)	0.773(4)	-2.5609(9)
	0.60	9.07(8)	2.27(2)	2.27(2)	0.100(1)	1.003(5)	-3.0834(6)
	0.70	10.58(9)	2.70(2)	2.70(2)	0.126(1)	1.592(5)	-3.6140(6)
	0.80	11.9(1)	3.13(3)	3.13(3)	0.158(1)	2.763(6)	-4.1071(8)
	0.90	13.0(1)	3.57(3)	3.57(3)	0.197(2)	4.664(9)	-4.5330(9)
	1.00	13.8(1)	4.00(4)	4.00(4)	0.247(2)	7.50(1)	-4.901(1)
2.0	0.10	1.564(1)	0.313	0.313	0.011	0.956(2)	-0.5028(2)
	0.20	3.02(2)	0.64(3)	0.642(3)	0.023	0.942(3)	-0.9842(6)
	0.30	4.42(3)	0.99(6)	0.991(6)	0.037	0.958(3)	-1.4586(8)
	0.40	5.82(4)	1.36(1)	1.36(1)	0.052	1.026(4)	-1.9421(7)
	0.50	7.29(6)	1.74(1)	1.74(1)	0.070(1)	1.197(4)	-2.4479(5)
	0.60	8.83(7)	2.16(2)	2.16(2)	0.091(1)	1.541(5)	-2.9828(4)
	0.70	10.36(9)	2.59(2)	2.59(2)	0.115(1)	2.205(5)	-3.5203(5)
	0.80	11.7(1)	3.04(3)	3.04(3)	0.144(1)	3.385(6)	-4.0215(8)
	0.90	12.8(1)	3.48(3)	3.48(3)	0.180(1)	5.237(9)	-4.462(1)
	1.00	13.7(1)	3.91(4)	3.91(4)	0.228(2)	8.10(1)	-4.830(1)

Table 27.

As in Table 25 for $x_1 = 0.75$.

T^*	ρ^*	N_{11}	N_{12}	N_{21}	N_{22}	z	$U^E/N\varepsilon_1$
1.25	0.10	2.171(4)	0.132	0.396	0.004	0.789(2)	-0.885(2)
	0.20	4.03(2)	0.271(1)	0.813(4)	0.010	0.526(3)	-1.654(3)
	0.30	5.48(4)	0.407(3)	1.222(8)	0.015	0.410(4)	-2.273(4)
	0.40	6.65(6)	0.535(4)	1.61(1)	0.022	0.349(4)	-2.779(3)
	0.50	7.86(7)	0.662(5)	1.99(2)	0.029	0.352(5)	-3.301(1)
	0.60	9.26(8)	0.793(7)	2.38(2)	0.037	0.584(6)	-3.8953(8)
	0.70	10.75(9)	0.931(8)	2.79(2)	0.046	1.379(5)	-4.5263(7)
	0.80	12.1(1)	1.076(9)	3.23(3)	0.057(1)	3.006(6)	-5.0963(8)
	0.90	13.1(1)	1.22(1)	3.67(3)	0.071(1)	5.687(9)	-5.5657(8)
	1.00	13.9(1)	1.37(1)	4.10(4)	0.091(1)	9.78(2)	-5.942(1)
1.50	0.10	1.841(1)	0.118	0.355	0.004	0.821(2)	-0.7533(5)
	0.20	3.46(2)	0.242(1)	0.725(4)	0.009	0.700(3)	-1.428(2)
	0.30	4.88(4)	0.368(2)	1.104(7)	0.014	0.641(4)	-2.027(2)
	0.40	6.22(5)	0.495(4)	1.49(1)	0.020	0.634(4)	-2.595(1)
	0.50	7.60(6)	0.626(5)	1.88(2)	0.026	0.748(5)	-3.182(1)
	0.60	9.08(8)	0.762(6)	2.29(2)	0.034	1.100(5)	-3.8112(5)
	0.70	10.58(9)	0.905(8)	2.71(2)	0.043	1.955(6)	-4.4489(6)
	0.80	11.9(1)	1.050(9)	3.15(3)	0.053(1)	3.590(6)	-5.0269(7)
	0.90	13.0(1)	1.20(1)	3.59(3)	0.066(1)	6.214(9)	-5.5066(9)
	1.00	13.8(1)	1.34(1)	4.03(4)	0.084(1)	10.29(2)	-5.890(1)
2.0	0.10	1.572(1)	0.105	0.315	0.004	0.950(2)	-0.6454(2)
	0.20	3.04(2)	0.216(1)	0.647(3)	0.008	0.910(2)	-1.2538(6)
	0.30	4.44(3)	0.332(2)	0.996(6)	0.012	0.935(3)	-1.8422(8)
	0.40	5.85(5)	0.455(3)	1.37(1)	0.018	1.029(4)	-2.4356(7)
	0.50	7.32(6)	0.586(5)	1.76(1)	0.023	1.264(5)	-3.0571(5)
	0.60	8.86(7)	0.724(6)	2.17(2)	0.031	1.754(5)	-3.7063(4)
	0.70	10.37(9)	0.869(7)	2.61(2)	0.039	2.681(6)	-4.3533(6)
	0.80	11.7(1)	1.018(9)	3.06(3)	0.048	4.299(7)	-4.9408(7)
	0.90	12.8(1)	1.17(1)	3.50(3)	0.061(1)	6.87(1)	-5.4340(8)
	1.00	13.7(1)	1.31(1)	3.94(4)	0.076(1)	10.89(2)	-5.822(1)