

Erratum

Thermal Transport Properties in the Normal Phase of Dilute $^3\text{He} - ^4\text{He}$ Mixtures, by J. Tuttle, F. Zhong, and H. Meyer, *J. Low Temp. Phys.* **83**, 283 (1991)

Due to an error in converting the molar volume derivatives presented in an earlier publication¹ to density derivatives, the columns 3, 4 and 6 of Table I are incorrect. Here we present the corrected Table I. The original Fig. 6, showing the Separation factor Ψ , has also been revised, and we present it here although the changes do not alter the original Figure 6 substantially. The authors are very indebted to Peter Lucas and Adam Woodcraft for pointing out the errors in one of the columns of the Table, and to Dan Murphy for help in locating the data files.

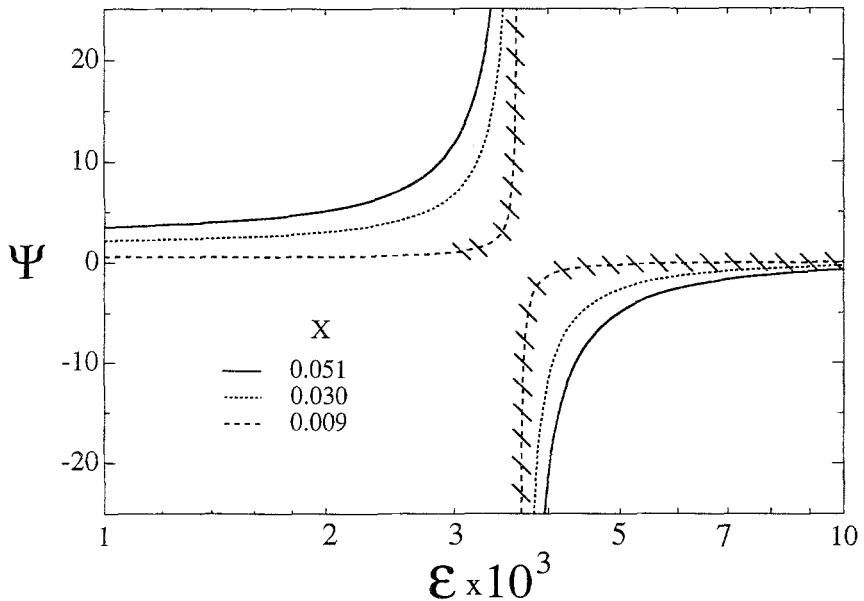


Fig. 6. The separation factor Ψ for three mixtures in the region where $k_T > 0$. The hash marks show the region in which Ψ was calculated using the extrapolated k_T for $X=0.93\%$.

TABLE I

Values of the Thermal Conductivity κ , $(\partial\rho/\partial T)_{X,P}$, $(\partial\rho/\partial X)_{T,P}$, k_T , and the Thermal Separation Factor Ψ for Three Mixtures as a Function of the Reduced Temperature at Standard Intervals. The numbers in parantheses for k_T ($X=0.93\%$) are the extrapolated values. These in turn give extrapolated values for ψ , also shown in parantheses.

ε	κ (mW/cm K)	$(\partial\rho/\partial T)_{X,P}$ (g/cm ³ K)	$100 \times (\partial\rho/\partial X)_{T,P}$ (g/cm ³)	k_T	Ψ
$X = 5.11e-2$					
1.0e-5	0.294	6.88e-3	-6.24	3.88e-1	1.68e+0
3.0e-5	0.281	5.61e-3	-6.42	3.61e-1	1.97e+0
6.0e-5	0.272	4.81e-3	-6.54	3.48e-1	2.26e+0
1.0e-4	0.266	4.22e-3	-6.62	3.30e-1	2.47e+0
3.0e-4	0.238	2.94e-3	-6.81	2.61e-1	2.88e+0
6.0e-4	0.215	2.13e-3	-6.92	2.03e-1	3.14e+0
1.0e-3	0.199	1.54e-3	-7.00	1.60e-1	3.46e+0
2.0e-3	0.175	7.23e-4	-7.12	1.09e-1	5.11e+0
2.5e-3	0.168	4.58e-4	-7.16	9.38e-2	6.97e+0
3.0e-3	0.163	2.40e-4	-7.19	8.23e-2	1.17e+1
3.2e-3	0.161	1.63e-4	-7.20	7.84e-2	1.64e+1
3.4e-3	0.159	8.97e-5	-7.21	7.49e-2	2.86e+1
3.6e-3	0.158	2.07e-5	-7.23	7.16e-2	1.19e+2
3.8e-3	0.157	-4.47e-5	-7.23	6.86e-2	-5.27e+1
4.0e-3	0.156	-1.07e-4	-7.24	6.57e-2	-2.11e+1
4.5e-2	0.153	-2.50e-4	-7.27	5.95e-2	-8.20e+0
5.0e-3	0.151	-3.79e-4	-7.28	5.42e-2	-4.93e+0
6.0e-3	0.147	-6.03e-4	-7.31	4.57e-2	-2.62e+0
8.0e-3	0.141	-9.66e-4	-7.36	3.40e-2	-1.23e+0
1.0e-2	0.136	-1.25e-3	-7.40	2.64e-2	-7.37e-1
$X = 3.01e-2$					
1.0e-5	0.408	6.95e-3	-6.30	3.87e-1	1.65e+0
3.0e-5	0.374	5.67e-3	-6.49	3.49e-1	1.88e+0
6.0e-5	0.352	4.86e-3	-6.61	3.16e-1	2.02e+0
1.0e-4	0.336	4.26e-3	-6.70	2.80e-1	2.07e+0
3.0e-4	0.287	2.98e-3	-6.88	1.84e-1	2.00e+0
6.0e-4	0.250	2.16e-3	-7.00	1.31e-1	2.00e+0
1.0e-3	0.224	1.56e-3	-7.08	1.00e-1	2.13e+0
2.0e-3	0.191	7.31e-4	-7.20	6.51e-2	3.01e+0
2.5e-3	0.183	4.64e-4	-7.24	5.54e-2	4.06e+0
3.0e-3	0.177	2.42e-4	-7.27	4.79e-2	6.73e+0
3.2e-3	0.174	1.64e-4	-7.28	4.54e-2	9.43e+0
3.4e-3	0.172	9.07e-5	-7.29	4.32e-2	1.63e+1
3.6e-3	0.170	2.09e-5	-7.31	4.11e-2	6.72e+1
3.8e-3	0.168	-4.52e-5	-7.31	3.91e-2	-2.96e+1
4.0e-3	0.167	-1.08e-4	-7.32	3.73e-2	-1.18e+1
4.5e-3	0.164	-2.53e-4	-7.35	3.34e-2	-4.54e+0
5.0e-3	0.162	-3.83e-4	-7.36	3.01e-2	-2.71e+0
6.0e-3	0.158	-6.11e-4	-7.39	2.48e-2	-1.40e+0
8.0e-3	0.151	-9.76e-4	-7.44	1.75e-2	-6.22e-1
1.0e-2	0.146	-1.26e-3	-7.48	1.26e-2	-3.47e-1

TABLE I (Continued)

ε	κ (mW/cm K)	$(\partial\rho/\partial T)_{X,P}$ (g/cm ³ K)	$100 \times (\partial\rho/\partial X)_{T,P}$ (g/cm ³)	k_T	Ψ
$X = 9.35e-3$					
1.0e-5	0.820	7.03e-3	-6.36	3.46e-1	1.45e+0
3.0e-5	0.622	5.72e-3	-6.56	2.66e-1	1.41e+0
6.0e-5	0.541	4.91e-3	-6.68	2.00e-1	1.26e+0
1.0e-4	0.485	4.31e-3	-6.76	1.50e-1	1.09e+0
3.0e-4	0.352	3.01e-3	-6.96	6.88e-2	7.37e-1
6.0e-4	0.287	2.18e-3	-7.08	4.00e-2	6.01e-1
1.0e-3	0.248	1.57e-3	-7.16	2.56e-2	5.40e-1
2.0e-3	0.202	7.39e-4	-7.28	1.23e-2	5.60e-1
2.5e-3	0.189	4.69e-4	-7.32	0.22e-3	6.66e-1
3.0e-3	0.181	2.45e-4	-7.35	7.12e-3	9.86e-1
3.2e-3	—	1.66e-4	-7.36	(6.5e-3)	(1.3e+0)
3.4e-3	—	9.16e-5	-7.37	(5.9e-3)	(2.2e+0)
3.6e-3	—	2.12e-5	-7.39	(5.3e-3)	(8.5e+0)
3.8e-3	—	-4.57e-5	-7.40	(4.9e-3)	(-3.7e+0)
4.0e-3	—	-1.09e-4	-7.40	(4.4e-3)	(-1.4e+0)
4.5e-3	—	-2.56e-4	-7.43	(3.5e-3)	(-4.7e-1)
5.0e-3	—	-3.87e-4	-7.44	(2.8e-3)	(-2.5e-1)
6.0e-3	—	-6.18e-4	-7.47	(1.8e-3)	(-1.0e-1)
8.0e-3	—	-9.86e-4	-7.52	(0.8e-3)	(-0.3e-1)
1.0e-2	—	-1.28e-3	-7.56	(0.4e-3)	(-0.1e-1)

REFERENCE

1. F. Zhong, J. Tuttle, and H. Meyer, *J. Low Temp. Phys.* **79**, 9 (1990).