

Solubility of N₂O in and Density, Viscosity, and Surface Tension of Aqueous Piperazine Solutions. Peter W. Derks, Kees J. Hogendoorn, and Geert F. Versteeg*, *J. Chem. Eng. Data* 2005, 50, 1947–1950.

The density, viscosity, and gas solubility data of Cullinane¹ given in Figures 2, 3, and 4 in our paper were assumed to

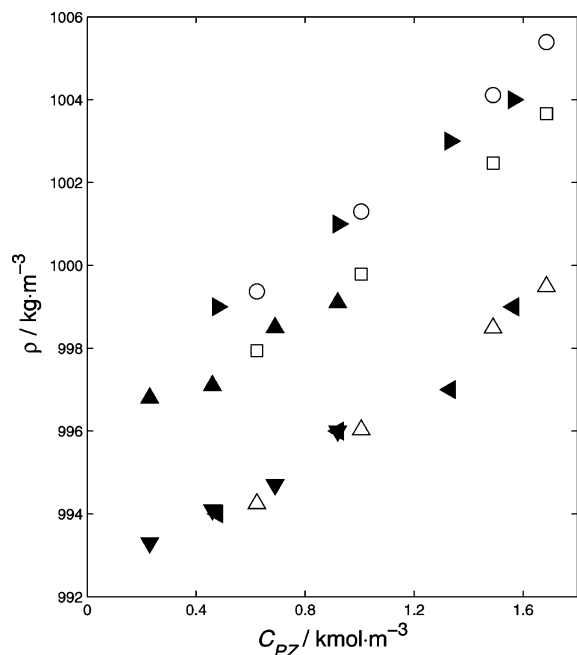


Figure 2. Density of aqueous piperazine solutions (ρ) as a function of PZ concentration. At 298.15 K: \circ , this work; “solid triangle pointing right”, Cullinane.¹⁵ At 303.15 K: \square , this work; \blacktriangle , Sun et al.⁵ At 313.15 K: \triangle , this work; \blacktriangledown , Sun et al.⁵ “solid triangle pointing left”, Cullinane.¹⁵

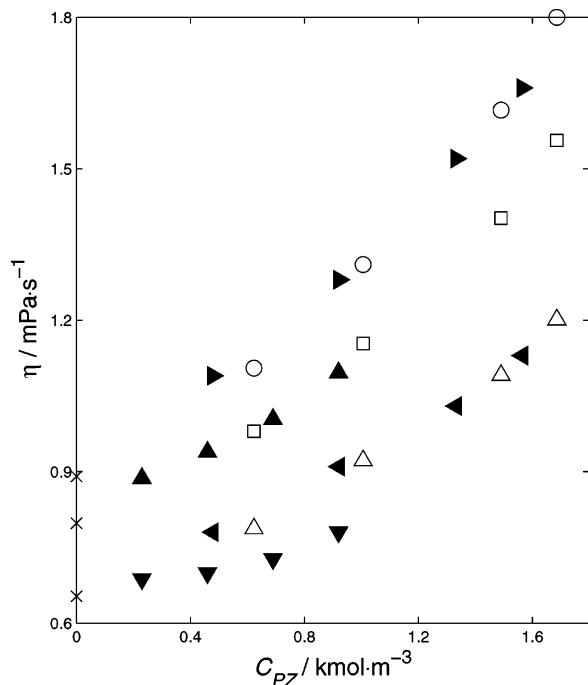


Figure 3. Viscosity of aqueous piperazine solutions (η) as a function of PZ concentration. At 298.15 K: \circ , this work; “solid triangle pointing right”, Cullinane.¹⁵ At 303.15 K: \square , this work; \blacktriangle , Sun et al.⁵ At 313.15 K: \triangle , this work; \blacktriangledown , Sun et al.⁵ “solid triangle pointing left”, Cullinane;¹⁵ \times , pure water viscosity data at (298.15, 303.15, and 313.15) K.¹⁶

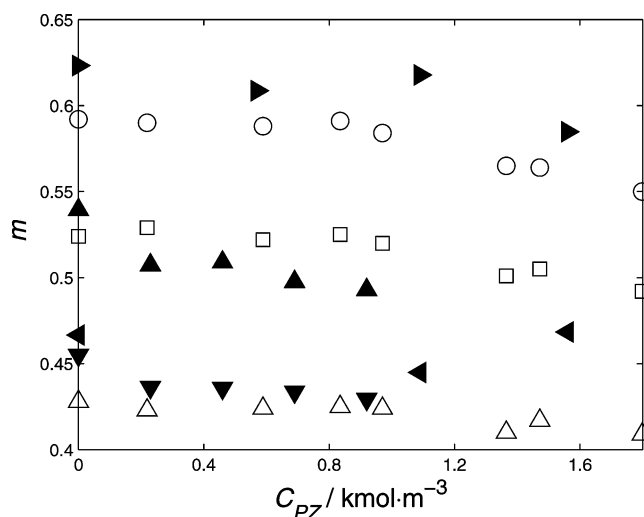


Figure 4. Solubility of N₂O, as the distribution coefficient (m) in aqueous piperazine solutions as a function of PZ concentration. At 298.15 K: \circ , this work; “solid triangle pointing right”, Cullinane.¹⁵ At 303.15 K: \square , this work; \blacktriangle , Sun et al.⁵ At 313.15 K: \triangle , this work; \blacktriangledown , Sun et al.⁵ “solid triangle pointing left”, Cullinane.¹⁵

be a function of concentration when in fact the values in the thesis were reported as molalities. Using the corrected compositions, it is concluded that the densities and viscosities determined in our paper agree well with those reported by Cullinane.¹ They are compared in new Figures 2, 3, and 4 provided here. The references in the figures are those given in our original paper.

Acknowledgment

We thank George Goff and Gary Rochelle, University of Texas, for pointing out this misinterpretation.

Literature Cited

- (1) Cullinane, J. T. Thermodynamics and Kinetics of Aqueous Piperazine with Potassium Carbonate for Carbon Dioxide Absorption. Ph.D. Dissertation, University of Texas, Austin, 2005.

JE0504616