

Reference Data for the Density and Viscosity of Liquid Cadmium, Cobalt, Gallium, Mercury, Indium, Silicon, Thallium, and Zinc

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In a recent series of three papers, reference correlations for the density and viscosity of Aluminium, Iron¹, Copper, Tin², Antimony, Bismuth, Lead, Nickel, and Silver³, were presented. In this paper the work is concluded by presenting reference correlations for the density and viscosity of liquid Cadmium, Cobalt, Gallium, Mercury, Indium, Silicon, Thallium, and Zinc. The available experimental data have been critically examined with the intention of establishing a density and a viscosity standard. All experimental data have been categorized into primary and secondary data according to the quality of measurement, the technique employed and the presentation of the data, as specified by a series of criteria. Standard reference correlations for the density and the viscosity for these liquid metals based upon the primary data, are presented.

[1] Assael M.J., Kakosimos K., Bannish M., Brillo J., Egly I., Brooks R., Qusted P.N., Mills K.C., Nagashima A., Sato Y., and Wakeham W.A., "Reference Data for the Density and Viscosity of Liquid Aluminium and Liquid Iron", *Phys. Chem. Ref. Data* **35**:285-300 (2006).

[2] Assael M.J., Kalyva A.E., Antoniadis K.E., Banish R.M., Egly I., Qusted P.N., Wu. J., Kaschnitz E., Wakeham W.A., "Reference Data for the Density and Viscosity of Liquid Copper and Liquid Tin", *J. Phys. Chem. Ref. Data* **39**:033105:1-9 (2010).

[3] Assael M.J., Kalyva A.E., Antoniadis K.E., Banish R.M., Egly I., Wu. J., Kaschnitz E., Wakeham W.A., "Reference Data for the Density and Viscosity of Liquid Antimony, Bismuth, Lead, Nickel and Silver", *High Temp. High Press.* (in press)