

## Book Reviews

---

**CRC Handbook of Liquid–Liquid Equilibrium Data of Polymer Solutions.** By C. Wohlfarth. CRC Press: Boca Raton, Florida, 2008. 675 pp. \$US 289.95. ISBN 978-1-4200-6798-9.

This handbook will be useful for those workers who wish to know whether there exists any published material on liquid–liquid equilibrium data for a particular polymer solution. When such data were available in numerical form in a particular reference, the author has compiled upper and lower critical solution temperature and cloud point and coexistence data on these polymer solutions in tables, but without any critical evaluation. To help the reader, however, the tables show characterization data on the polymers, including various molecular weight averages, percent composition of copolymers, and the name and/or source of commercial polymers. The purity of the solvents is not mentioned. Most of these tables should be quite useful to workers who are interested in the systems involved. In those cases, however, in which many workers have studied the same system, such as polystyrene–cyclohexane, all the data are tabulated separately, without comparison or critical evaluation. For example, there are over 90 references on the polystyrene–cyclohexane system, all tabulated separately. For the purpose of this sort of handbook, much of the more repetitious data could have been left out of the tables, but the references should, of course, have been included.

In addition, data are not presented in the handbook for many of the systems that exist in the literature. For example, if a

reference contains data only in graphical form, the graphs were not digitized and neither the graphs nor any characterization data on the polymers involved are shown in this handbook. The reader will have to consult the reference to see and evaluate the data. In my opinion, this volume would have been much more useful if the graphical data had been included.

In summary, this volume is essentially a literature survey of about 1000 literature sources containing data on cloud point curves, coexistence data, and critical points of polymer solutions through December 2006. The survey consists of approximately 800 polymer–solvent systems, 100 polymer–solvent–solvent systems, 200 polymer–polymer–solvent systems, and 25 quaternary systems that include at least one solvent. The polymers include different types of copolymers as well as homopolymers. Electrolyte and supercritical solutions, however, have not been included in this handbook.

There are ten useful pages of introduction at the front of the handbook that, among other things, give excellent references to the thermodynamics of polymer solutions.

**Sonja Krause**

Rensselaer Polytechnic Institute

JE800163Z

10.1021/je800163z