

CHAPTER OVERVIEW

17: Solutions

Chemical Principles (Zumdahl and Decoste) Textmap Alternative

Solutions are all around us. Air, for example, is a solution. If you live near a lake, a river, or an ocean, that body of water is not pure H_2O but most probably a solution. Much of what we drink—for example, soda, coffee, tea, and milk—is at least in part a solution. Solutions are a large part of everyday life. A lot of the chemistry occurring around us happens in solution. In fact, much of the chemistry that occurs in our own bodies takes place in solution, and many solutions—such as the Ringer’s lactate IV solution—are important for our health. In our understanding of chemistry, we need to understand a little bit about solutions. In this chapter, you will learn about the special characteristics of solutions, how solutions are characterized, and some of their properties.

Topic hierarchy

- [17.1: Solution Composition](#)
- [17.2: The Energies of Solution Formation](#)
- [17.3: Factors Affecting Solubility](#)
- [17.4: The Vapor Pressures of Solutions](#)
- [17.5: Boiling-Point Elevation and Freezing-Point Depression](#)
- [17.7: Colligative Properties of Electrolyte Solutions](#)
- [17.7: Osmotic Pressure](#)
- [17.8: Colloids](#)

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