Lesson 120: Chemistry Solutions Terms

Solutions

1. **Homogeneous** – Uniform in structure or composition throughout.
2. **Heterogeneous** – Consisting of dissimilar elements or parts; not homogeneous.
3. **Solution** – A homogeneous mixture of two or more substances, which may be solids, liquids, gases, or a combination of these.
4. **Mixture** – A composition of two or more substances that are not chemically combined with each other and are capable of being separated.
5. **Solute** – A substance dissolved in another substance, usually the component of a solution present in the lesser amount.
6. **Solvent**– A substance in which another substance is dissolved, forming a solution.
7. **Miscible** – Can be mixed in all proportions.
8. **Immiscible** – Cannot undergo mixing or blending.
9. **Alloy** – A homogeneous mixture or solid solution of two or more metals, the atoms of one replacing or occupying interstitial positions between the atoms of the other.
10. **Filtration** – The act or process of separating or (completely or partially) removing selected components of a mixture by means of a filter.
11. **Suspension** – A system in which microscopically visible particles are dispersed throughout a less dense liquid or gas from which they are easily filtered but not easily settled because of system viscosity or molecular interactions.
12. **Tyndall effect** – Visible scattering of light along the path of a beam of light as it passes through a system containing discontinuities, such as the surfaces of colloidal particles in a colloidal solution.
13. **Colloid** – A system in which finely divided particles, which are approximately 10 to 10,000 angstroms in size, are dispersed within a continuous medium in a manner that prevents them from being filtered easily or settled rapidly.
14. **Rate of Solution** – How quickly a solute dissolves in a solvent. Factors determining the rate of solution are: surface area, stirring, amount of solute already dissolved, and temperature.

Solubility

15. **Electrolytes** – A chemical compound that ionizes when dissolved or molten to produce an electrically conductive medium.
16. **Nonelectrolytes** – A substance whose molecules in solution do not dissociate to ions and thus do not conduct an electric current.
17. **Concentrated** – Having a high concentration of the solute.
18. **Dilute** – Describing a solution that has a relatively low concentration of solute. solubility - The amount of a substance that can be dissolved in a given amount of solvent.
19. **Aqueous** – Dissolved in water.
20. **Tincture** – A solution with alcohol as the solvent.
21. **Emulsion** – A suspension of small globules of one liquid in a second liquid with which the first will not mix: an emulsion of oil in vinegar.
22. **Saturated** – Combined with or containing all the solute that can normally be dissolved at a given temperature.
23. **Supersaturated** – To cause (a chemical solution) to be more highly concentrated than is normally possible under given conditions of temperature and pressure.

Molarity and Colligative Properties

24. **Molarity** – The molar concentration of a solution, usually expressed as the number of moles of solute per liter of solution.
25. **Molality** – The molal concentration of a solute, usually expressed as the number of moles of solute per kilograms of solvent.
26. **Colligative Property** – Properties dependent on the number of molecules but not their nature.