LIQUIDS & SOLUTIONS

Solution: Mixture of two or more components that form a single phase, which is homogeneous down to the molecular level. Component that determines the phase of the soln is the solvent, other components are solutes – dispersed throughout solvent as molecules/ions

Phase: Part of a system separated by one or more boundaries (interfaces), which can be physically separated (e.g. filtration, centrifuge, etc.)

Homogeneous: Same composition throughout (compared w/ heterogeneous which is uneven mixture)

Dissolution: Transfer of molecules/ions from the solid state into soln

Solubility: Limit to which a solute can be dissolved in a solvent under a particular set of environmental conditions

Miscibility: Combination of two solvents that mix completely to form a homogeneous soln

Solubility

- Solubility of drug or excipient is defined following a particular set of rules and definitions
- Solubility determined at 20°C and is based on amount of solvent in mL or g (called 'parts') required to dissolve 1 gram of drug/excipient