

# Types of Solutions

**Solution:** a homogeneous mixture where one substance dissolves into another

**Solvent:** Substance that is present in the largest amount

**Solute:** substance that dissolves

When a solute dissolves into a solvent, no chemical reaction occurs.

Solutions can be separated using physical properties like boiling point.

See Table 8.1 on page 285

**Aqueous Solution:** water is the solvent

**Miscible:** 2 liquids that dissolve into each other. Ex H<sub>2</sub>O and ethanol

**Immiscible:** 2 liquids that don't dissolve H<sub>2</sub>O and oil.

**Solubility:** The amount of solute that dissolves in a given quantity of solvent at a certain temperature. Ex. 36 g of NaCl per 100 ml water at 20 ° C.

**Saturated solution:** no more solute will dissolve

**Unsaturated solution:** can dissolve more solute

**Soluble:**  $>1\text{g}$  per 100 ml

**Insoluble:**  $<0.1\text{g}$  per 100 ml

**Sparingly or slightly soluble:** between  $0.1\text{g}$  and  $1\text{g}$