Class-IX Chemistry

Is Matter Around Us Pure Colloidal Solution

TRUE SOLUTION	SUSPENSION	COLLOIDAL SOLUTION
Homogenous mixture	Heterogeneous mixture	Heterogeneous mixture
Appearance: Transparent	Appearance: Opaque	Appearance: Translucent
Particle size: very small, cannot be seen by naked eye	Particle size: large, can be seen by naked eye	Particle size: between true solution and suspension, cannot be seen by naked eye
Solute particles do not settle down when left undisturbed	Solute particles settle down when left undisturbed	Solute particles do not settle down when left undisturbed
Filtration separation -not possible	Filtration separation - possible	Filtration separation - not possible
E.g. salt solution	E.g. sand in water	E.g. milk

Types of Solutions:

The various types of solutions are:

- **1.Solution of Solid in a Solid.** Metal alloys are the solutions of solids in solids. For example, brass is a solution of zinc in copper.
- **2.Solution of Solid in a Liquid.** Sugar solution and salt solution are the solution of solids in liquids.
- **3.Solution of Liquid in a Liquid.** Vinegar is a solution of acetic acid (ethanoic acid) in water.
- **4.Solution of Gas in a Liquid.** Soda-water is a solution of carbon dioxide gas in water.
- **5.Solution of Gas in a Gas.** Air is a solution of gases like oxygen, argon, carbon dioxide and water vapour, etc.