

Chapte no. 15. Solutions.

① What is concentrated solution?

→ concentration of a solution refers to the amount of solute dissolved in a fixed amount of solvent. A solution containing a small amount of solute is known as a dilute solution and that which contains large amount of solute is known as a concentrated solution.

② Define Saturated Solution?

→ amount of solute at given temperature is known as a saturated solution.

③ what is solubility of solute?

→ The amount of a solute in grams required to convert 100g of a solvent into a saturated solution at a given temperature is known as the solubility of the solute in that solvent.

④ what are the factors that influence solubility?

→ The nature of solute & the temperature are two factors that influence solubility.

⑤ Explain classification of mixture?

All solutions are mixture.

If the composition of the constituents is the same throughout the mixture, it is known as a homogeneous mixture. All solutions are homogeneous mixture.

eg. sugar solution, salt solution, air, ornamental gold

The components of such mixture can not be seen separately with the naked eyes.

If the components of in a mixture are not distributed uniformly it is known as heterogeneous mixture.

Eg. a mixture of salt & sand, muddy water
a mixture of water & kerosene.

Here the components can be seen separately
with naked eye.

6) _____ is used to express the presence of
very small amount of a solute.

- (a) ppm (b) mg (c) gm (d) g ml

→ (a) ppm

7) The solution before reaching saturation is
known as _____ solution.

- (a) saturated (b) unsaturated

- (c) supersaturated (d) colloid.

→ (b) unsaturated.

8) In the case _____ the solute particles size
is comparatively bigger.

- (a) solvent (b) suspension (c) colloids (d) none
of above

→ (c) colloids

9) A solution, which contains more amount of
solute than that is required to saturate
is known as

- (a) saturated solⁿ. (b) unsaturated solⁿ.

- (c) supersaturated solⁿ (d) none of above.

→ (c) supersaturated solⁿ.

10) most of the juices that we drink are liquid
in the colloidal form.

- (a) solution (b) solvent (c) solute (d) colloidal.

Differentiate betⁿ solute & colloids.

Solute	colloids
<p>① The size of solute particles present in a solution is so small that it cannot be seen with naked eye.</p> <p>② particles are very minute they cannot scatter a beam of light. Hence the path of beam of light is not visible.</p> <p>③ salt water, sugar water</p>	<p>① In the case of colloids the solute particles are size comparatively bigger.</p> <p>② they scatter beam of light, thus making the path of the beam size visible.</p> <p>③ milk eg.</p>