

9.9.2

Magnetic separation

- Some substances are attracted to a magnet and are called magnetic substances.
- In a mixture where one of the components is magnetic.
- Separating insoluble solids from liquids.
- Insoluble solids are those that do not dissolve in a given liquid.
- For example - sand is insoluble in water.
- Such solids can be separated from the given liquid in the following ways.
- Sedimentation, decantation, filtration and leaching.

Q1) Select homogeneous and heterogeneous mixture.

homogeneous mixture

salt solution

alcohol and water

air dissolved in water.

gas water

boast

heterogeneous mixture

petrol and water

sand and charcoal

air

fruit juice

mixture

Definite

- Pure substance - pure substance is either a element or compound.
- It contains the same kind of atom or molecule and has a definite set of physical and chemical properties.

Ex - Gold, water, hydrogen, alcohol.

- b) Impure substance - A substance in which some other substances are also present in smaller or larger amounts is called an impure substance. Mixture is an impure substance.

Ex - Water and Alcohol; petrol and water.

- c) Alloy - Alloy is a homogeneous solid mixture of two or more metal or metal and a non-metal is called alloy.

Ex - Brass \rightarrow bronze

- d) Solution - The homogeneous mixture of water (or any solvent) and a substance soluble in it is called a solution.
Ex - Lemonade.

- e) Heterogeneous mixture - A mixture in which the components are not uniformly distributed throughout its volume and can be easily seen separately is called heterogeneous mixture. Ex - soil, oil on petrol in water.

- f) Homogeneous mixture - A mixture in which its constituents are uniformly distributed throughout its volume and cannot be seen separately.
@ homogeneous mixture - ex - Alcohol, air.