

cup
6/9/21
Ch-5

Mixtures

A mixture is made when two or more substances are combined, but they are not combined chemically.

HW
9/9/21

1) Differentiate between pure substances and mixtures.

Pure substances

Pure substances are either elements or compounds. They contain the same kind of atoms and molecules and have a definite set of physical and chemical properties.

Ex: Gold is an element which contains the same kind of atoms. Sugar is a compound which contains the same kind of molecules and has the same properties throughout.

Mixtures

A substance in which some other substances are also present in smaller or larger amounts is called a mixture.

Ex: Air is a mixture. Its constituents are oxygen, nitrogen, carbon dioxide, water vapour, dust particles, microbes, smoke, etc. These constituents have different kinds of molecules. Therefore, a mixture is an impure substance having no fixed composition.

2) Give 3 examples each of Homogeneous and Heterogeneous mixtures.

ans) Heterogeneous mixtures: -

Ex - Sand in water, Oil in water, Smoke

Homogeneous mixtures: -

Ex - Water, Salt in water, Juice

3) Explain the principle of the process of winnowing for separation of solid-solid mixture.

ans) Winnowing is a method used to separate light solids from heavier one.

Ex: - Take a mixture of rice and husk. When it is allowed to fall from a height, rice, grains, being heavier, fall vertically down while husk gets blown away by air and forms the heap at a small distance away from the heap of rice.

In this way, rice is separated from husk.

The process of grain from husk and hay with the help of wind is called winnowing.