

CHAPTER 02

Acids, Bases and Salts

Acids:

Acids are those substances, which are sour to taste and can turn blue litmus paper to red. We have many natural substances, which are acids.

Ex.

Vinegar contains acetic acid. Orange fruits contains acid called citric acid. Similarly, milk contains lactic acid.

Bases:

Bases are those substances which are bitter to taste and can turn red litmus paper into blue.

Ex.

Soaps we use are basic. Washing soda and Baking soda are also bases.

Indicators:

Indicators are those substances, which can change their colour when added to acid or base like substances. They will be used to identify the acids (or) bases by changing their own colour. Hence, we call them as indicators.

- Broadly, we classify them as natural and synthetic indicators.

Ex.

Litmus solution and turmeric powder are natural indicators.

Litmus solution is purple in colour when it is neither acidic nor basic in acidic solution. Litmus paper (or) Litmus solution turns red, where as in basic solution, it turns blue.

- Turmeric does not show any colour in acidic solution, but in basic solution, it turns red.
- Methyl orange, Phenolphthalein are synthetic indicators.
- Methyl orange shows red colour in acidic medium and yellow colour in basic medium.
- Phenolphthalein indicator is colourless in acidic medium and turns pink in basic medium.

Olfactory indicators:

They also indicate, whether added substance is acid or base, but not by changing colour. But by changing smell (or) odour.

Ex.

Vanilla, onion, clove are examples of olfactory indicators.

