

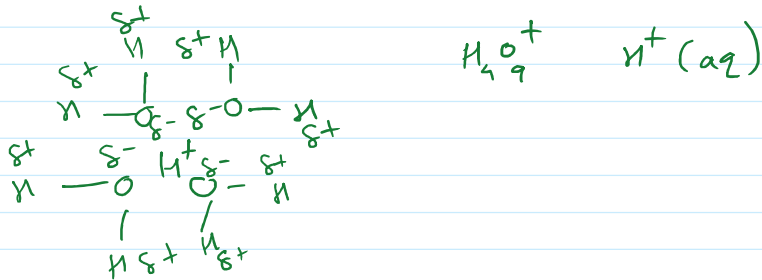
Acids, Bases and Salts

An acid is a substance that gives $H^+(aq)$ ions in solution.

Acids are sour in taste.

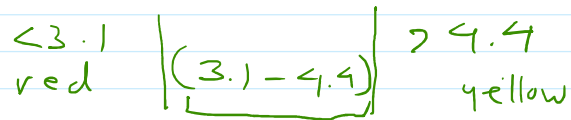
Base is a substance that gives $OH^-(aq)$ ions in solution.

Bases are bitter in taste.



Indicators:

Acid-base indicators are dyes or mixtures of dyes which are used to indicate the presence of acids and bases.



Synthetic indicators:

i) Methyl orange acidic \rightarrow red basic \rightarrow yellow.

ii) Phenolphthalein acidic \rightarrow colourless basic \rightarrow pink.

(8-10)

Natural indicators:

i) Litmus solution:

Litmus solution is a purple dye, extracted from lichens (a plant belonging to the division Thallophyta)
 acid \rightarrow red base \rightarrow blue.

ii) Red cabbage leaves

acidic \rightarrow red basic \rightarrow bluish green/yellow

iii) Turmeric

acidic \rightarrow yellow

basic \rightarrow orange

iv) Coloured petals of some flowers such as Hydrangea, Petunia and Geranium.

Odour indicators:

These change odour in acidic and basic medium eg: onion, vanilla, clove oil.

These have characteristic smell in acidic medium and lose their smell in basic medium.