Date / /
Page No.

Uses

→ Used for bleaching cotton
Imp. → used as an oxidizing agent in chemical industries
→ Used for disinfection of water.

* Baking Soda ($NaHCO_3$) (Base)

The chemical nature of baking soda is sodium bicarbonate
Hydrogencarbonate.

It is produced on a larges scale by treating cold and concentrated solution of sodium chloride with ammonia (NH_3) and carbon dioxide.

Preview from Notesale.co.uk
Page 11 of 13

Imp. $NaCl + H_2O + CO_2 + NH_3 \rightarrow \underbrace{NH_4Cl}_{\text{Ammonium chloride}} + \underbrace{NaHCO_3}_{\text{Baking soda}}$

On heating, it decomposes to give sodium carbonate with the evolution of Carbondioxide.

Imp. $\underbrace{2NaHCO_3}_{\text{Baking Soda}} \xrightarrow{\Delta} \underbrace{Na_2CO_3}_{\text{washing soda}} + H_2O + CO_2$

* Uses → is Used as an antacid to treat acidity in stomach.
(ii) Used to make baking powder, which is used in preparation of cakes, breads etc.

$$SO_2 + H_2O \rightarrow H_2SO_3$$

Date / /
Page No.

* Washing Soda :- ($Na_2CO_3 . 10H_2O$)

Sodium Carbonate

$$Na_2CO_3 \xrightarrow{10H_2O} \underbrace{Na_2CO_3 . 10H_2O}_{\text{Real Washing Soda}}$$

Uses

1. Used in glass, soap and paper industries
Imp. 2. Used to remove permanent hardness of water
3. Used in the formation of borax. ($Na_2H_{20}B_4O_{17}$) → colorless crystalline solid, that dissolves in water to make a basic solution. (Borax is a salt.)

Preview from Notesale.co.uk
Page 12 of 13

* Plaster of Paris ($CaSO_4 . \frac{1}{2} H_2O$)

The chemical nature of POP - Calcium Sulphate Hemihydrate

→ POP is prepared by heating th gypsum at 373 K. On heating, it loses water molecules and becomes calcium Sulphate hemihydrate.

* When POP absorbs water, it transforms into gypsum

$CaSO_4$ → Dead Burned Plaster