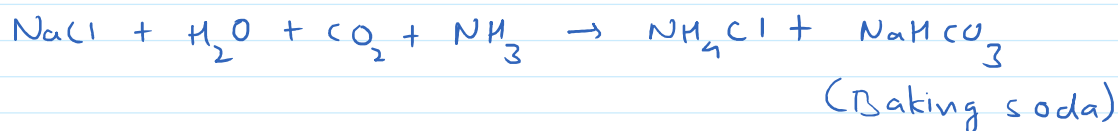


Baking Soda

Preparation



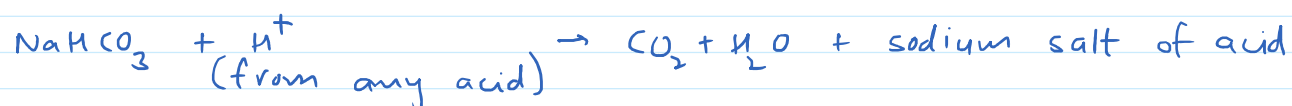
Properties

- i) It is a mild non corrosive base hence its pH is > 7 .
- ii) heating effect:



Uses:

- i) For making baking powder which is a mixture of baking soda (NaHCO_3) and a mild edible acid such as tartaric acid. When baking powder is heated or mixed in water, the following reaction takes place:

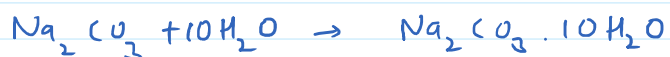


Carbon dioxide produced during the reaction causes bread or cake to rise making them soft and spongy.

- ii) Being alkaline, it neutralises excess acid in the stomach and provides relief, hence it is an ingredient of antacids.
- iii) Used in soda-acid fire extinguishers.

Washing soda ($\text{Na}_2\text{CO}_3 \cdot 10\text{H}_2\text{O}$)

It is hydrated sodium carbonate



Properties

- i) It is a basic salt. Its aqueous solution has $\text{pH} > 7$.

Uses

- i) It is used in glass, soap and paper industry.
- ii) It is used in manufacture of sodium compounds such as Borax.
- iii) Sodium carbonate can be used as a cleaning agent for domestic purposes.
- iv) It is used to remove permanent hardness of water.