

Hydrochloric acid

Strong ammonium hydroxide

# Hydrochloric Acid

**HCl/ 36.46**

**Syn:** spirit of salt, muriatic acid,  
acidium hydrochloricum

**MOP:-**

Conc.Sulphuric acid react with sodium chloride



# Properties :-

## a) Physical Properties:

- Clear colorless liquid
- Pungent odour
- Miscible with water
- Miscible with alcohol
- fuming liquid

## b) Chemical Properties:-

### i) Reaction with metals :

hydrochloric acid react with sodium gives sodium chloride & evolution of hydrogen gas.



ii) Reaction with alkali :

hydrochloric acid react with sodium hydroxide gives sodium chloride & water



## Uses:

- 1) As a pharmaceutical aid  
( acidifying agent)
- 2) Solvent in industry
- 3) For manufacturing of basic  
pharmaceuticals
- 4) Reagent in Laboratory

## Storage

“ It should be stored in well closed container of glass at a temperature not exceeding 30<sup>0</sup>C”

# Strong ammonium hydroxide

**NH<sub>3</sub>/ 17.03**

**Syn**: Ammonia solution, ammonium hydroxide, strong ammonium water, liquor ammoniae forties

**MOP**:-

By mixing ammonium chloride with slaked lime





Properties :-

**a) Physical Properties:**

- Clear colorless liquid
- Pungent odour
- Characteristic taste
- Miscible with water
- Aqueous solution is strongly alkaline in nature

## b) Chemical Properties:-

i) Reaction with acid :

React with acid it form salts and water



ii) Reaction with cations :

React with acid it form complex

## Uses:

- Alkalinizing agent
- Reflux stimulant (fainted person)
- Vaso constrictor
- Strong base
- Antacid
- Reagent in Laboratory

## Storage

“ It should be stored in well closed amber colored container with a rubber stopper at a cool Place.”

## Incompatibility

- With iodine (Explosive compound)
- heavy metals, silver salts and tannins