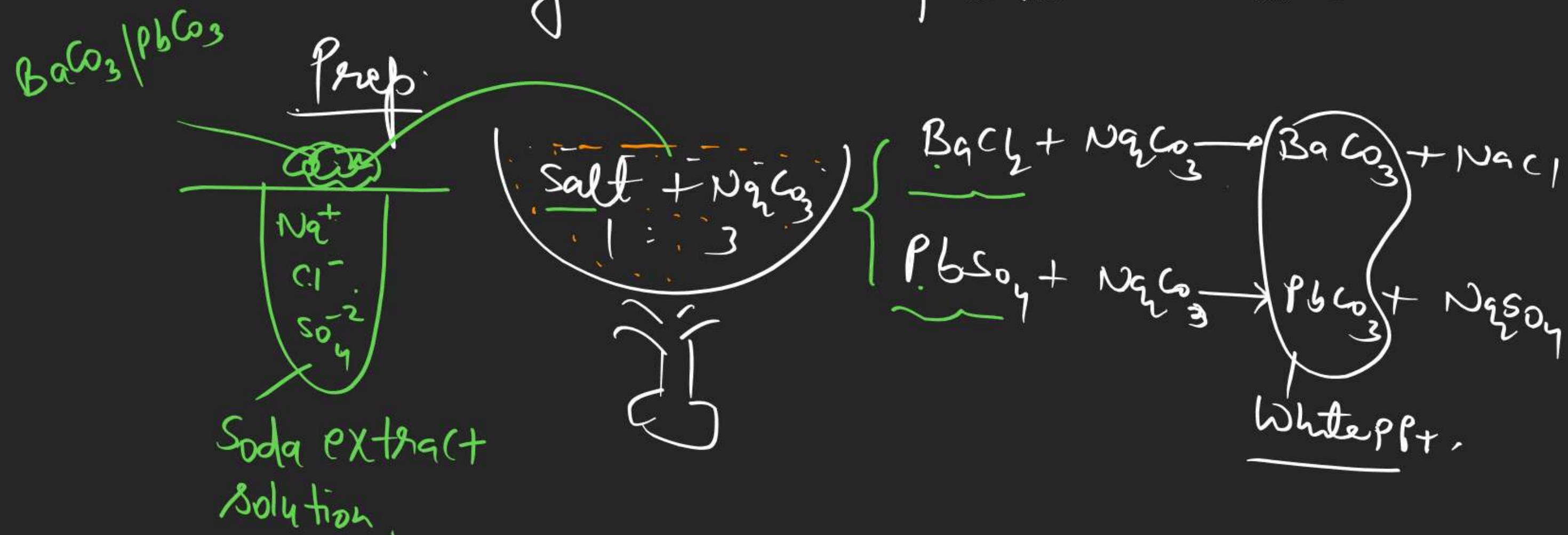


Soda extract solution

Soda extract solution is very useful when any insoluble salt present in mixture





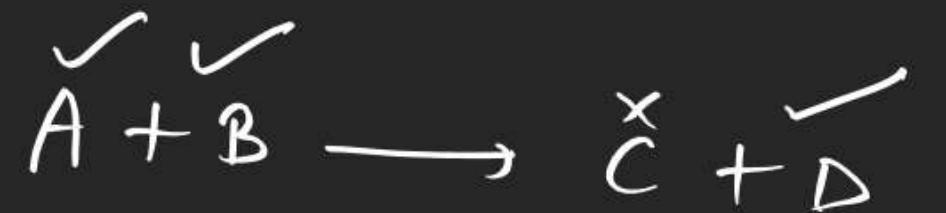
Note \Rightarrow we can not use oxidising acid for neutralising soda extract solution.

Conc. H_2SO_4 , Conc. HNO_3
So generally Chilkooy is use.

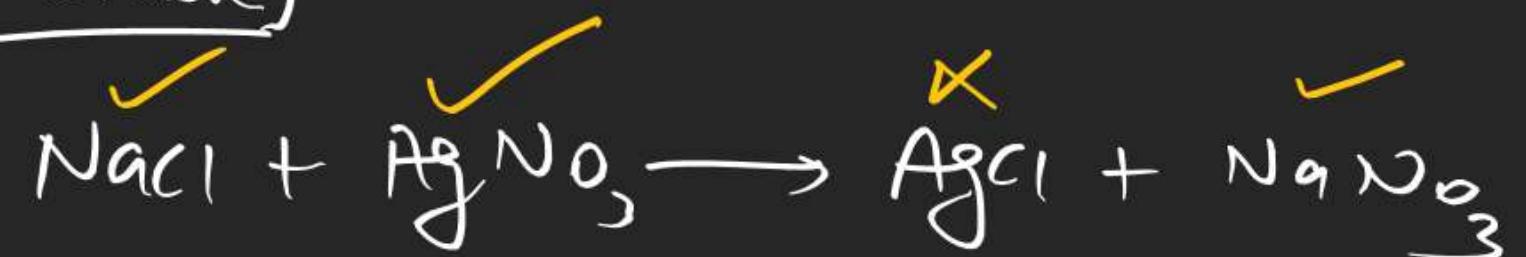
Type of reaction

- ① PPT reaction / Ion-exchange reaction / double decomposition reaction.
- ② Redox reaction
- ③ Thermal decomposition
- ④ Complex formation reaction
- ⑤ neutralization

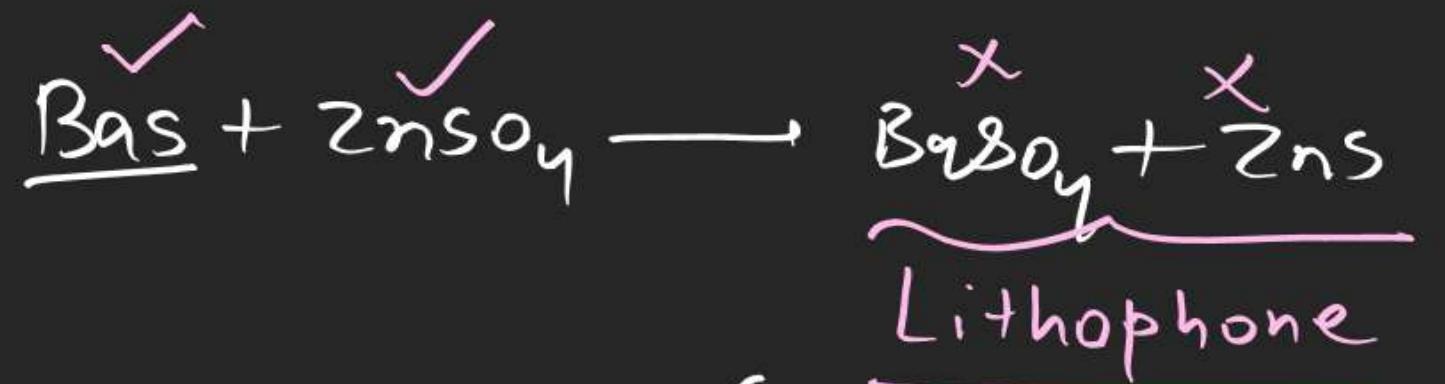
Ppt reaction



$\checkmark \checkmark = \text{soluble}$



$\left\{ \begin{array}{l} \text{NO}_3^- = \text{all nitrates salt are soluble} \\ \text{Cl}^- | \text{Br}^- | \text{I}^- \Rightarrow \text{all Cl}^- | \text{Br}^- | \text{I}^- \text{ salt are soluble} \\ \text{except } \text{Ag}^+ | \text{Pb}^{+2} | \text{Cu}^{+2} | \text{Hg}^{+2} \end{array} \right.$



(use as white pigment in paint)

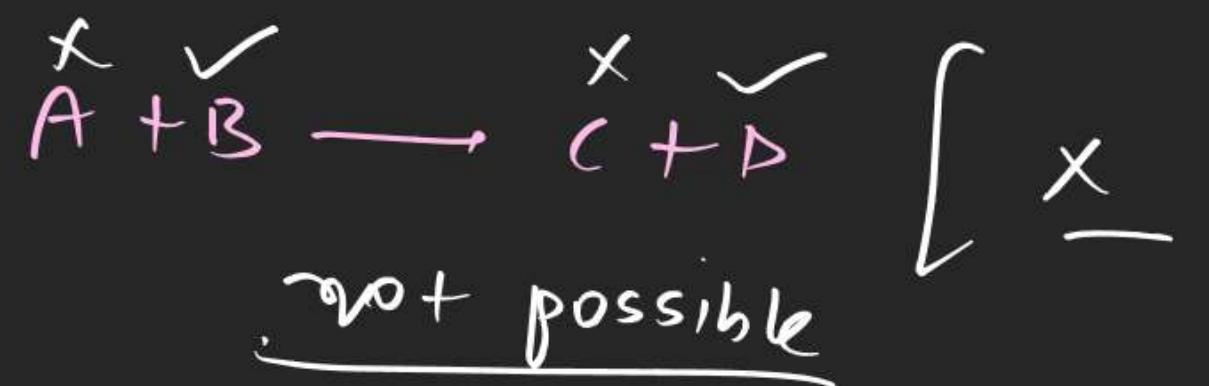
\bar{S}^2 = all \bar{S}^2 are Insoluble

except I A | II A | (N H)₂S

$\bar{S O}_4^2$ - all are soluble

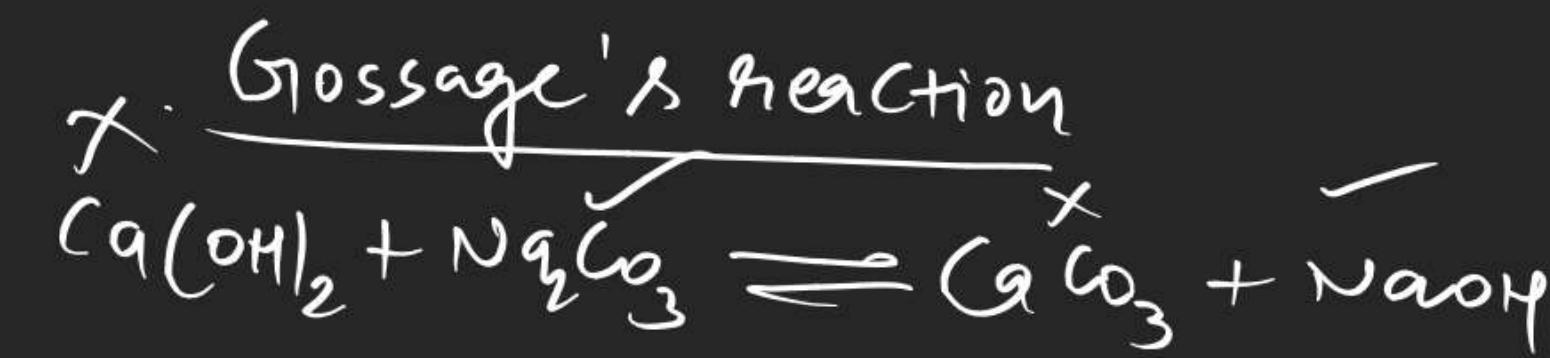
except $\text{Ba} | \text{Sr} | \text{Pb} \Rightarrow$ Insoluble

$\text{Ca} | \text{Ag}$ = Sparingly soluble (s.s)



it is depends in K_{SP} of A and K_{SP} of C

$$K_{SP} \text{ of } A > K_{SP} \text{ of } C$$



$$K_{sp} \text{ of } \text{Ca(OH)}_2 > K_{sp} \text{ of } \text{CaCO}_3$$

Note \Rightarrow before performing the test of anion Soda extract

Solution must be neutralized by suitable acid

Suitable acid \hookrightarrow anionic part of acid
must be diff from the anion that has to be detected.