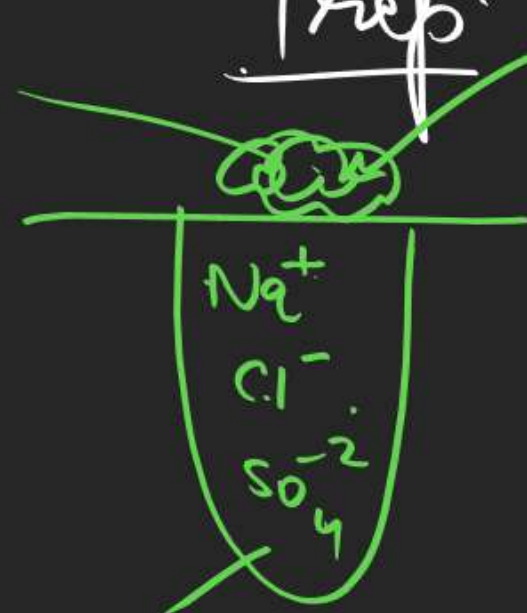


Soda extract solution

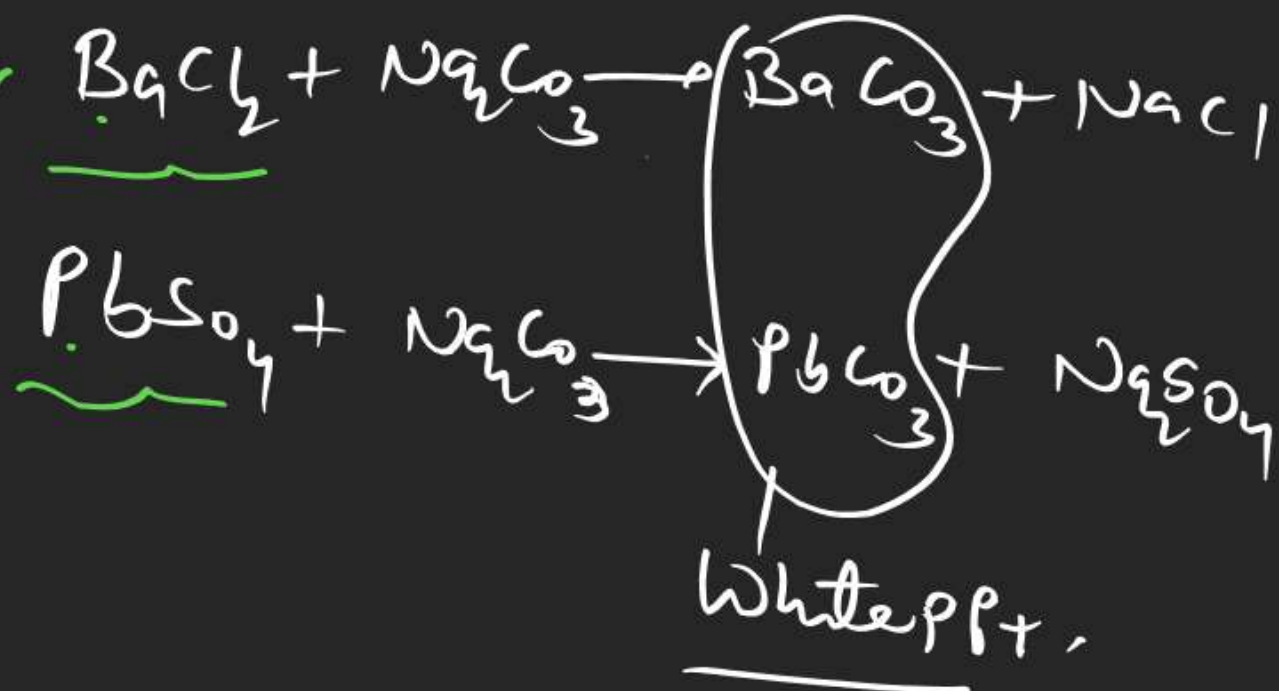
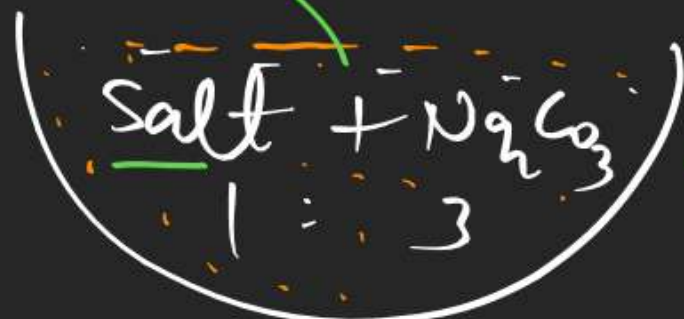
Soda extract solution is very useful when any insoluble salt present in mixture

$\text{BaCO}_3 / \text{PbCO}_3$

Prep.



Soda extract solution.





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

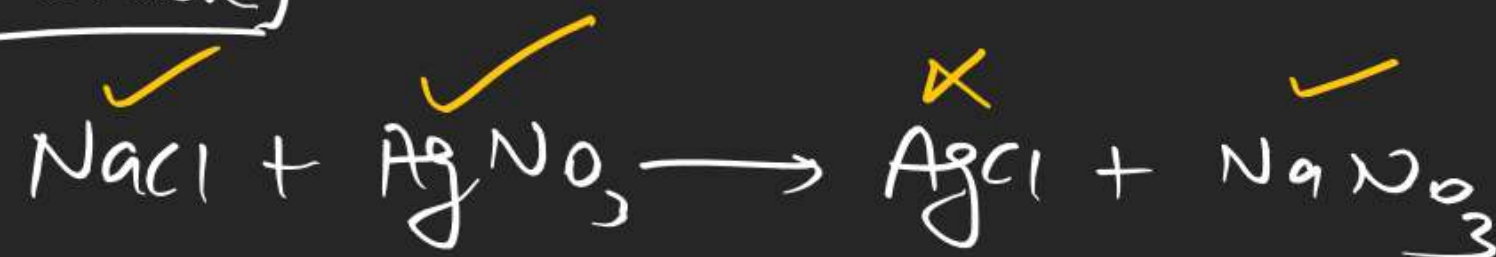
Conc. H_2SO_4 Conc. HNO_3
So generally CH_3COOH is use.

type of reaction

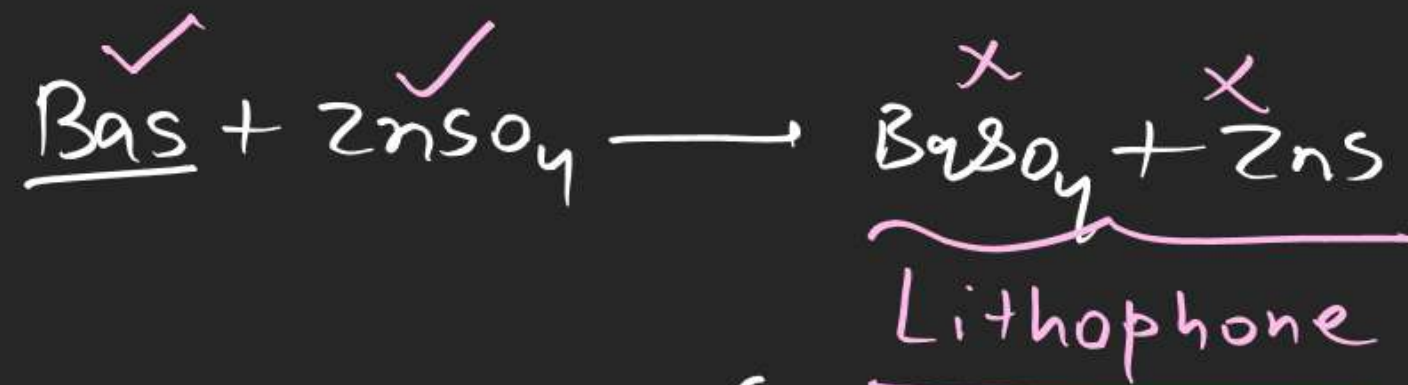
- ① PPT reaction / Ion-exchange reaction / double decomposition reaction.
- ② Redox Reaction
- ③ Thermal decomposition
- ④ Complex formation reaction
- ⑤ neutralization

Ppt reaction

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



$NO_3^- = \text{all nitrates salts are soluble}$
 $Cl^- | Br^- | I^- \Rightarrow \text{all } Cl^- | Br^- | I^- \text{ salts are soluble}$
except
 $Ag^+ | Pb^{+2} | Cu^{+2} | Hg_2^{+2}$



(use as white pigment in paint)

S^{2-} - all S^{2-} are Insoluble

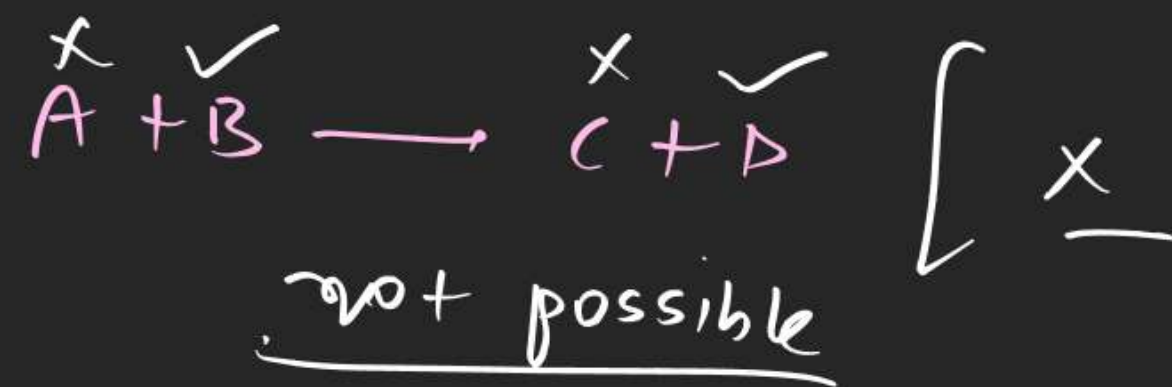
except IA / IIA / $(\text{NH}_4)_2\text{S}$

SO_4^{2-} - all are soluble

except

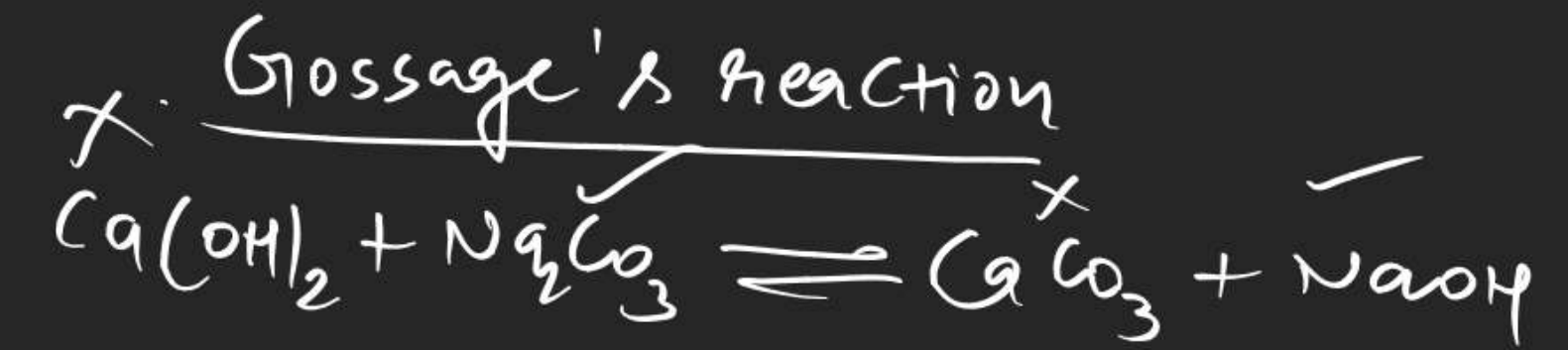
Ba | Sr | Pb \Rightarrow Insoluble

Cu | Ag = Sparingly soluble (s.s)



It is depends on 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 neutralize
by suitable acid

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