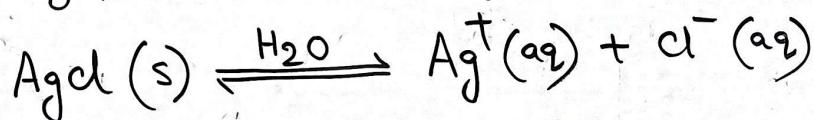


Solubility product

When a sparingly soluble salt is mixed with definite amount of suitable solvent, then very little amount of salt get dissolved in the solvent & maximum amount of salt remain as precipitate. After some time at a particular temp. an equm is established b/w dissolved salt & undissolved ppt. At ^{that} particular temp. the product of molar concⁿ of ions present in solⁿ is called its solubility product.

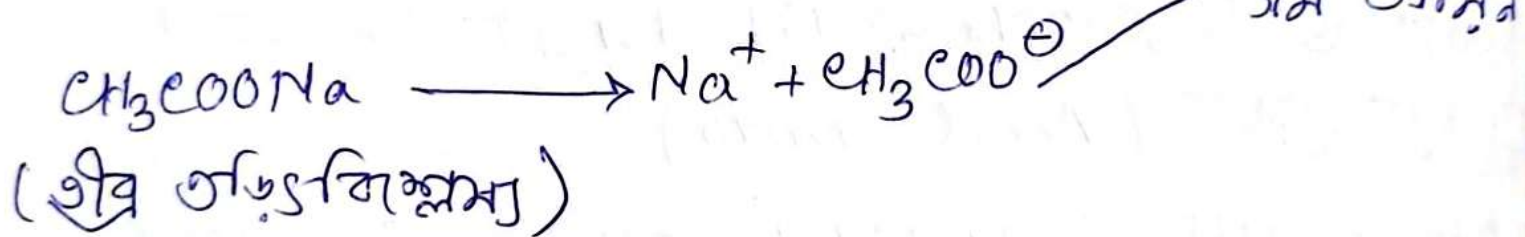
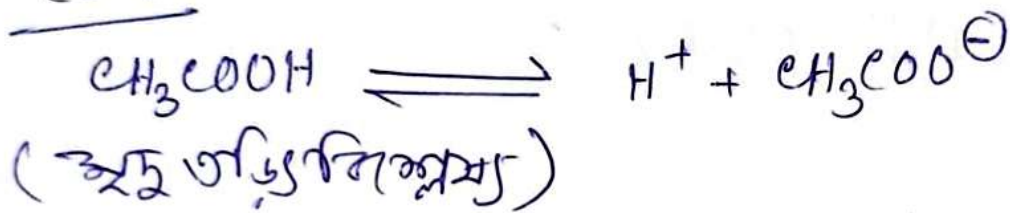


$$K_{sp} = [\text{Ag}^+(\text{aq})] \cdot [\text{Cl}^-(\text{aq})]$$

ଓମ୍ ଓମ୍ମନ ପ୍ରକାର:-

କେବଳା ଉତ୍ତ ଓଡ଼ିସିସିଲ୍ଲୋମ୍ମ୍ କାନ୍ଦାକ୍ଷର୍- କେବଳ ଓମ୍ ଓମ୍ମନ ଉତ୍ତ କେବଳା ତ୍ରିସି ଓଡ଼ିସିସିଲ୍ଲୋମ୍ କେବଳା କେବଳା, ଉତ୍ତ ଓଡ଼ିସିସିଲ୍ଲୋମ୍ମ୍ ବିଲ୍ଲୋକନ କେବଳା କେବଳା ଓମ୍, ଏହି କେବଳାକେ ଓମ୍ ଓମ୍ମନ ପ୍ରକାର ବଳେ,

Ex:-



∴ ଓମ୍ମନ CH_3COOH ଏଡ଼ ବିଲ୍ଲୋକନ କେବଳା କ୍ରିୟା କାନ୍ଦା ।

Buffer Solution

It is a type of solⁿ in which if we add few amount of acid or base or water then pH of the solⁿ does not affected.

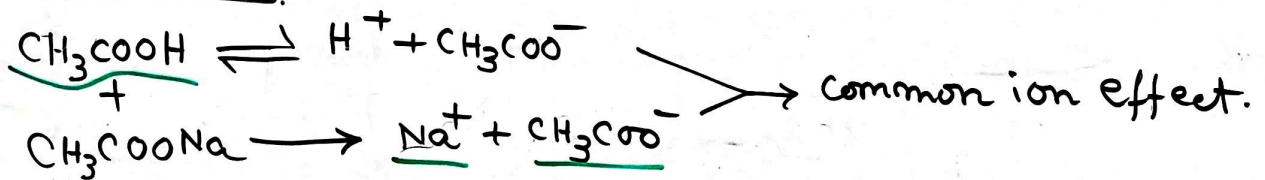
It has some definite value of pH, which can resist the external acid or base. This type of solⁿ is called buffer solⁿ.

e.g. Blood

1:1 mixture of CH_3COOH & $\text{CH}_3\text{COONa} \Rightarrow$ Acid buffer.

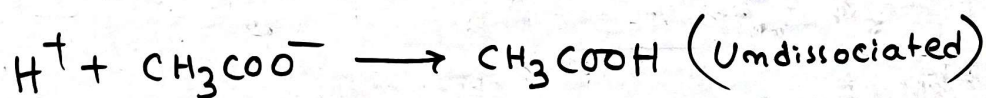
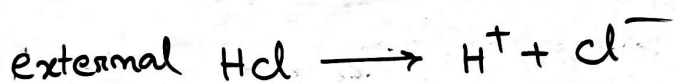
1:1 " " NH_4OH & $\text{NH}_4\text{Cl} \Rightarrow$ Basic buffer.

Buffer Action of an acid buffer

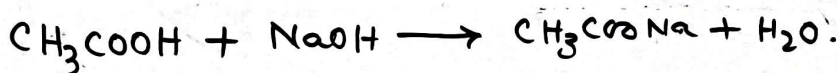
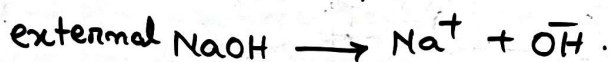


This buffer solⁿ contains CH_3COOH , Na^+ & CH_3COO^- ions.

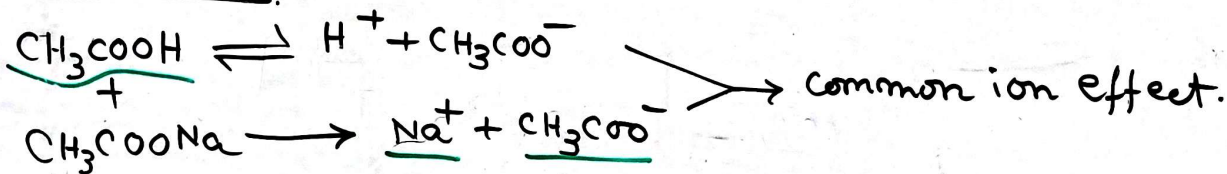
① Removal of external H^+ ions :-



② Neutralisation of external OH^- ions :-



Buffer Action of an acid buffer



This buffer solⁿ contains $CH_3COOH, Na^+ \text{ \& } CH_3COO^-$ ions.