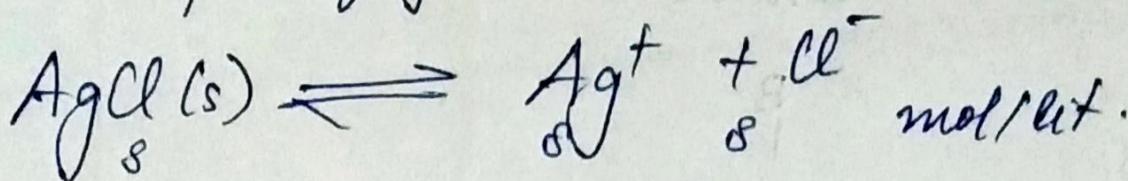


## Solubility Product

• In sparingly soluble salts -



$$K_{sp} = [\text{Ag}^{\text{+}}][\text{Cl}^{\text{-}}] = s \cdot s = s^2$$

$$\boxed{s = \sqrt{K_{sp}}}$$

$K_{sp}$  = solubility product.

$s$  = solubility of AgCl.

In ionic product,

If Ionic product =  $K_{sp}$  → the solution will be saturated

If  $I.P > K_{sp}$  → it will be supersaturated solution (ppt. occur).

If  $I.P < K_{sp}$  → it will be unsaturated sol<sup>n</sup> (a ppt. will not form).