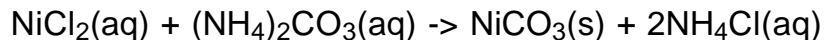
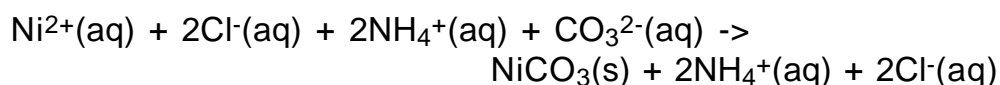


## Chem12 Net Ionic Equations : Notes-60

When one solution is added to another, a precipitate may form. A **precipitate** is an ionic solid with a low solubility. ( < 0.1M ) (Note : All ionic substances are soluble to some extent, but some have a much higher solubility than others). An example of this type of reaction is given below.



In this reaction, the green precipitate nickel(II)carbonate is formed. It is labeled (s) for solid. The reactants are labeled (aq) for aqueous which means dissolved in water. Both of the reactant solutions are clear. When one is added to the other, the precipitate forms immediately. It can be seen from the **solubility table** that  $\text{NiCO}_3$  is not soluble ( or of low solubility ).  $\text{NH}_4\text{Cl}$  remains in solution. We can write the **ionic equation** for the reaction.



In this reaction we can cancel species that are common to both sides. These are called **spectator ions**. (chlorine and ammonium ) The result is called the **net ionic equation**. It is given below.

