

SOLUBILITY RULES

1. Salts of ammonium (NH_4^+) and Group IA are always soluble.

2.
 - a. All chlorides (Cl^-) are soluble except AgCl , Hg_2Cl_2 , and PbCl_2 which are insoluble.

 - b. All bromides (Br^-) are soluble except AgBr , Hg_2Br_2 , HgBr_2 , and PbBr_2 which are insoluble.

 - c. All iodides (I^-) are soluble except AgI , Hg_2I_2 , HgI_2 , and PbI_2 which are insoluble.

3. Chlorates (ClO_3^-), nitrates (NO_3^-), and acetates (CH_3COO^-) are soluble.

4. Sulfates (SO_4^{-2}) are soluble except CaSO_4 , SrSO_4 , BaSO_4 , Hg_2SO_4 , HgSO_4 , PbSO_4 , and Ag_2SO_4 which are insoluble.

5. Phosphates (PO_4^{-3}), and carbonates (CO_3^{-2}) are insoluble except NH_4^+ and Group IA compounds.

6. All metallic oxides (O^{-2}) are insoluble except NH_4^+ and Group IA compounds.

7. All metallic hydroxides (OH^-) are insoluble except NH_4^+ and Group IA and Group IIA from calcium down.

8. All sulfides (S^{-2}) are insoluble except NH_4^+ and Groups IA and IIA.