

Solubility Guidelines

Table F
Solubility Guidelines

Ions That Form Soluble Compounds	Exceptions	Ions That Form Insoluble Compounds	Exceptions
Group 1 ions (Li ⁺ , Na ⁺ , etc.)		carbonate (CO ₃ ²⁻)	when combined with Group 1 ions or ammonium (NH ₄ ⁺)
ammonium (NH ₄ ⁺)		chromate (CrO ₄ ²⁻)	when combined with Group 1 ions or ammonium (NH ₄ ⁺)
nitrate (NO ₃ ⁻)		phosphate (PO ₄ ³⁻)	when combined with Group 1 ions or ammonium (NH ₄ ⁺)
acetate (C ₂ H ₃ O ₂ ⁻ or CH ₃ COO ⁻)		sulfide (S ²⁻)	when combined with Group 1 ions or ammonium (NH ₄ ⁺)
hydrogen carbonate (HCO ₃ ⁻)		hydroxide (OH ⁻)	when combined with Group 1 ions, Ca ²⁺ , Ba ²⁺ , or Sr ²⁺
chlorate (ClO ₃ ⁻)			
perchlorate (ClO ₄ ⁻)			
halides (Cl ⁻ , Br ⁻ , I ⁻)	when combined with Ag ⁺ , Pb ²⁺ , and Hg ₂ ²⁺		
sulfates (SO ₄ ²⁻)	when combined with Ag ⁺ , Ca ²⁺ , Sr ²⁺ , Ba ²⁺ , and Pb ²⁺		