

Solubility Rules for Ionic Compounds

Soluble Compounds	
Compounds Containing:	Notable Exceptions:
Group 1A ions (e.g. Na ⁺)	None
Ammonium (NH ₄ ⁺)	None
Acetate (C ₂ H ₃ O ₂ ⁻)	None
Nitrate (NO ₃ ⁻)	None
Halides (e.g. Cl ⁻)	Ag ⁺ , Pb ²⁺ , Hg ₂ ²⁺
Sulfate (SO ₄ ²⁻)	Ca ²⁺ , Sr ²⁺ , Ba ²⁺ , Pb ²⁺

Insoluble Compounds	
Compounds Containing	Notable Exceptions
Carbonate (CO ₃ ²⁻)	Group IA and NH ₄ ⁺
Phosphate (PO ₄ ³⁻)	Group IA and NH ₄ ⁺
Sulfide (S ²⁻)	Group IA, IIA, and NH ₄ ⁺
Hydroxide (OH ⁻)	Group IA, NH ₄ ⁺ , Ca ²⁺ , Sr ²⁺ , Ba ²⁺