

Solubility of common inorganic compounds in water

Negative Ions (anions)	Positive Ions (cations)	Solubility of compounds containing these ions
essentially all	alkali ions, Li ⁺ , Na ⁺ , K ⁺ , Rb ⁺ , Cs ⁺ , Fr ⁺	soluble
essentially all	hydrogen ion H ⁺	soluble
essentially all	ammonium ion, NH ₄ ⁺	soluble
nitrate, NO ₃ ⁻	essentially all	soluble
acetate C ₂ H ₃ O ₂ ⁻	essentially all	soluble
chloride, Cl ⁻ } bromide, Br ⁻ } iodide, I ⁻ }	Ag ⁺ , Pb ⁺² , Hg ₂ ⁺² , Cu ⁺	low solubility
	all others	soluble
sulfate, SO ₄ ⁻	Ca ⁺² , Sr ⁺² , Ba ⁺² , Pb ⁺² , Ra ⁺² , Ag ⁺	low solubility
	all others	soluble
sulfide, S ⁻²	alkali ions, H ⁺ , NH ₄ ⁺ , Be ⁺² , Mg ⁺² , Ca ⁺² , Sr ⁺² , Ba ⁺² , Ra ⁺²	soluble
	all others	low solubility
hydroxide, OH ⁻	alkali ions, H ⁺ , NH ₄ ⁺ , Sr ⁺² , Ba ⁺² , Ra ⁺² , Ca ⁺²	soluble
	all others	low solubility
phosphate, PO ₄ ⁻³ } carbonate, CO ₃ ⁻² } sulfite, SO ₃ ⁻² }	alkali ions, H ⁺ , NH ₄ ⁺	soluble
	all others	low solubility
chlorate, ClO ₃ ⁻ perchlorate, ClO ₄ ⁻	essentially all	soluble
chromate, CrO ₄ ⁻²	alkali metals, H ⁺ , NH ₄ ⁺	soluble
	all others	low solubility

Sources: Prentice Hall, 1987 *Modern Chemistry* and various internet sites