

Common Polyatomic Ions

+1	-1	-2	-3
NH ₄ ⁺ (ammonium)	OH ⁻ (hydroxide)	CO ₃ ²⁻ (carbonate)	PO ₄ ³⁻ (phosphate)
	NO ₃ ⁻ (nitrate)	SO ₄ ²⁻ (sulfate)	
	ClO ₃ ⁻ (chlorate)	CrO ₄ ²⁻ (chromate)	
	ClO ₄ ⁻ (perchlorate)	Cr ₂ O ₇ ²⁻ (dichromate)	
	C ₂ H ₃ O ₂ ⁻ (acetate)		
	HCO ₃ ⁻ (hydrogen carbonate)		

Diatomic Gases: H₂, O₂, F₂, Br₂, I₂, N₂, Cl₂

Capacity of electron shells: 2, 8, 8, 18, 18, 32, 32

Table of Solubilities in Water*

i - insoluble a - soluble	acetate	bromide	carbonate	chloride	chromate	hydroxide	nitrate	phosphate	sulfate	sulfide
Aluminum	i	a		a		i	a	i	a	
Ammonium	a	a	a	a	a	a	a	a	a	a
Barium	a	a	i	a	i	a	a	i	i	
Calcium	a	a	i	a	a	a	a	i	i	
Copper II	a	a	i	a	i	i	a	i	a	i
Iron II	a	a	i	a		i	a	i	a	i
Iron III	a	a		a	i	i	a	i	i	
Lead	a	i	i	i	i	i	a	i	i	i
Magnesium	a	a	i	a	a	i	a	i	a	
Mercury I	i	i	i	i	i		a	i	i	i
Mercury II	a	i	i	a	i	i	a	i		i
Potassium	a	a	a	a	a	a	a	a	a	a
Silver	i	i	i	i	i		a	i	i	i
Sodium	a	a	a	a	a	a	a	a	a	a
Zinc	a	a	i	a	a	i	a	i	a	i

*This table shows which ionic compounds dissolve (or stay dissolved) when in water