

Common Ionic Charges Reference Page

Ionic compound = Metal + Nonmetal

Element Cations

Element	Charge
Group 1 AND Silver	+1
Group 2 AND Zinc & Cadmium	+2
Group 13 (metals): Aluminum, Gallium, Indium	+3
All other Metals Roman Numerals give the charge	VARIES: Roman Numerals show the charge.
(I) +1 (VI) +6	
(II) +2 (VII) +7	
(III) +3 (VIII) +8	
(IV) +4 (IX) +9	
(V) +5 (X) +10	

Element Anions

Element	Charge
Group 17 Halogens	-1
Group 16 nonmetals: Oxygen, Sulfur, Selenium	-2
Group 15 nonmetals: Nitrogen, Phosphorous	-3

Common Acids

Hydrochloric HCl	Carbonic H ₂ CO ₃
Nitric HNO ₃	Sulfuric H ₂ SO ₄
Acetic CH ₃ COOH	Phosphoric H ₃ PO ₄

Polyatomic Ions

+1	-1	-2	-3
Ammonium NH ₄ ⁺	Acetate C ₂ H ₃ O ₂ ⁻¹	Carbonate CO ₃ ⁻²	Arsenate AsO ₄ ⁻³
	Bicarbonate HCO ₃ ⁻¹	Chromate CrO ₄ ⁻²	Borate BO ₃ ⁻³
	Bisulfate HSO ₄ ⁻¹	Dichromate Cr ₂ O ₇ ⁻²	Phosphate PO ₄ ⁻³
	Bromate BrO ₃ ⁻¹	Peroxide O ₂ ⁻²	
	Chlorate ClO ₃ ⁻¹	Selenate SeO ₄ ⁻²	
	Cyanide CN ⁻¹	Silicate SiO ₃ ⁻²	
	Hydroxide OH ⁻¹	Sulfate SO ₄ ⁻²	
	Iodate IO ₃ ⁻¹	Thiosulfate S ₂ O ₃ ⁻²	
	Nitrate NO ₃ ⁻¹		
	Perchlorate ClO ₄ ⁻¹		
	Permanganate MnO ₄ ⁻¹		
	Thiocyanate SCN ⁻¹		

Covalent Compounds

The number
of each atom
is given by
prefixes

Mono-	1
Di-	2
Tri-	3
Tetra-	4
Penta-	5
Hexa-	6
Hepta-	7
Octa-	8
Nona-	9
Deca-	10