

Table 9.3

Common Polyatomic Ions

Formula	Name
Charge = 1 -	
H_2PO_4^-	Dihydrogen phosphate
$\text{C}_2\text{H}_3\text{O}_2^-$	Acetate
HSO_3^-	Hydrogen sulfite
HSO_4^-	Hydrogen sulfate
HCO_3^-	Hydrogen carbonate
NO_2^-	Nitrite
NO_3^-	Nitrate
CN^-	Cyanide
OH^-	Hydroxide
MnO_4^-	Permanganate
ClO^-	Hypochlorite
ClO_2^-	Chlorite
ClO_3^-	Chlorate
ClO_4^-	Perchlorate
Charge = 2 -	
HPO_4^{2-}	Hydrogen phosphate
$\text{C}_2\text{O}_4^{2-}$	Oxalate
SO_3^{2-}	Sulfite
SO_4^{2-}	Sulfate
CO_3^{2-}	Carbonate
CrO_4^{2-}	Chromate
$\text{Cr}_2\text{O}_7^{2-}$	Dichromate
SiO_3^{2-}	Silicate
Charge = 3 -	
PO_3^{3-}	Phosphite
PO_4^{3-}	Phosphate
Charge = 1 +	
NH_4^+	Ammonium

Bicarbonate

 HCO_3^- Al^{3+} $^{2+}$ Zn^{2+}

Charge

 $^{2+}$

d: mercury

 Hg^{2+}

Table 9.2**Symbols and Names of Common Metal Ions with More than One Ionic Charge**

Symbol	Stock name	Classical name
Cu^+	Copper(I) ion	Cuprous ion
Cu^{2+}	Copper(II) ion	Cupric ion
Fe^{2+}	Iron(II) ion	Ferrous ion
Fe^{3+}	Iron(III) ion	Ferric ion
$^*\text{Hg}_2^{2+}$	Mercury(I) ion	Mercurous ion
Hg^{2+}	Mercury(II) ion	Mercuric ion
Pb^{2+}	Lead(II) ion	Plumbous ion
Pb^{4+}	Lead(IV) ion	Plumbic ion
Sn^{2+}	Tin(II) ion	Stannous ion
Sn^{4+}	Tin(IV) ion	Stannic ion
Cr^{2+}	Chromium(II) ion	Chromous ion
Cr^{3+}	Chromium(III) ion	Chromic ion
Mn^{2+}	Manganese(II) ion	Manganous ion
Mn^{3+}	Manganese(III) ion	Manganic ion
Co^{2+}	Cobalt(II) ion	Cobaltous ion
Co^{3+}	Cobalt(III) ion	Cobaltic ion

*A diatomic elemental ion.