

## Common Polyatomic Ions

### Anions

#### 1-

acetate,  $\text{CH}_3\text{COO}^-$   
 amide,  $\text{NH}_2^-$   
 azide,  $\text{N}_3^-$   
 benzoate,  $\text{C}_6\text{H}_5\text{COO}^-$   
 bromate,  $\text{BrO}_3^-$   
 chlorate,  $\text{ClO}_3^-$   
 chlorite,  $\text{ClO}_2^-$   
 cyanate,  $\text{OCN}^-$   
 cyanide,  $\text{CN}^-$   
 dihydrogen phosphate,  $\text{H}_2\text{PO}_4^-$   
 formate,  $\text{HCOO}^-$   
 hydrogen carbonate,  $\text{HCO}_3^-$   
 (bicarbonate)  
 hydrogen sulfate,  $\text{HSO}_4^-$   
 (bisulfate)  
 hydrogen sulfide,  $\text{HS}^-$   
 (bisulfide or hydrosulfide)  
 hydroxide,  $\text{OH}^-$   
 (called hydroxyl when aqueous)  
 hypochlorite,  $\text{ClO}^-$   
 iodate,  $\text{IO}_3^-$   
 nitrate,  $\text{NO}_3^-$   
 nitrite,  $\text{NO}_2^-$   
 perchlorate,  $\text{ClO}_4^-$   
 permanganate,  $\text{MnO}_4^-$   
 thiocyanate,  $\text{SCN}^-$   
 (thiocyanato)  
 triiodide,  $\text{I}_3^-$   
 vanadate,  $\text{VO}_3^-$

#### 2-

carbide,  $\text{C}_2^{2-}$   
 (saltlike)  
 carbonate,  $\text{CO}_3^{2-}$   
 chromate,  $\text{CrO}_4^{2-}$   
 dichromate,  $\text{Cr}_2\text{O}_7^{2-}$   
 imide,  $\text{NH}^{2-}$   
 manganate,  $\text{MnO}_4^{2-}$   
 metasilicate,  $\text{SiO}_3^{2-}$   
 monohydrogen phosphate,  $\text{HPO}_4^{2-}$   
 oxalate,  $\text{C}_2\text{O}_4^{2-}$   
 peroxide,  $\text{O}_2^{2-}$   
 peroxydisulfate,  $\text{S}_2\text{O}_8^{2-}$   
 phthalate,  $\text{C}_8\text{H}_4\text{O}_4^{2-}$   
 polysulfide,  $\text{S}_x^{2-}$   
 selenate,  $\text{SeO}_4^{2-}$   
 sulfate,  $\text{SO}_4^{2-}$   
 sulfite,  $\text{SO}_3^{2-}$   
 tartrate,  $\text{C}_4\text{H}_4\text{O}_6^{2-}$   
 tellurate,  $\text{TeO}_4^{2-}$   
 tetraborate,  $\text{B}_4\text{O}_7^{2-}$   
 thiosulfate,  $\text{S}_2\text{O}_3^{2-}$   
 tungstate,  $\text{WO}_4^{2-}$   
 zincate,  $\text{ZnO}_2^{2-}$

#### 3-

aluminate,  $\text{AlO}_3^{3-}$   
 arsenate,  $\text{AsO}_4^{3-}$   
 borate,  $\text{BO}_3^{3-}$   
 citrate,  $\text{C}_6\text{H}_5\text{O}_7^{3-}$   
 phosphate,  $\text{PO}_4^{3-}$

#### 4-

orthosilicate,  $\text{SiO}_4^{4-}$   
 pyrophosphate,  $\text{P}_2\text{O}_7^{4-}$

#### 5-

tripolyphosphate,  $\text{P}_3\text{O}_{10}^{5-}$

### Cations

#### 1+

ammonium,  $\text{NH}_4^+$   
 hydronium,  $\text{H}_3\text{O}^+$