

## List of Common Polyatomic Ions

NITROGEN		ORGANIC (CARBON CONT.)		NOTES
N <sup>3-</sup>	nitride	HCOO <sup>-</sup>	formate (derived from <i>formic acid</i> , also written HCO <sub>2</sub> <sup>-</sup> )	<b>-ate</b> Ending for the polyatomic ion with most common number of oxygen atoms
NO <sub>2</sub> <sup>-</sup>	nitrite	H <sub>3</sub> C <sub>2</sub> O <sub>2</sub> <sup>-</sup>	acetate (derived from <i>acetic acid</i> , also commonly written CH <sub>3</sub> COO <sup>-</sup> )	<b>-ite</b> One less oxygen than "ate"
NO <sub>3</sub> <sup>-</sup>	<b>nitrate</b>	C <sub>2</sub> O <sub>4</sub> <sup>2-</sup>	oxalate (derived from <i>oxalic acid</i> )	<b>per-</b> One additional oxygen than "ate"
NH <sub>4</sub> <sup>+</sup>	ammonium	<b>OXYGEN</b>		
<b>PHOSPHORUS</b>		O <sup>2-</sup>	oxide	<b>hypo-</b> One less oxygen than "ite"
P <sup>3-</sup>	phosphide	O <sub>2</sub> <sup>2-</sup>	<i>peroxide</i>	
PO <sub>3</sub> <sup>3-</sup>	phosphite	OH <sup>-</sup>	hydroxide	
HPO <sub>3</sub> <sup>2-</sup>	hydrogen phosphite	<b>CHLORINE</b>		
PO <sub>4</sub> <sup>3-</sup>	<b>phosphate</b>	Cl <sup>-</sup>	chloride	<b>-ide</b> Although the suffix is reserved for the monatomic anion, exceptions include cyanide, hydroxide, and peroxide
HPO <sub>4</sub> <sup>2-</sup>	hydrogen phosphate	ClO <sub>4</sub> <sup>-</sup>	<i>perchlorate</i>	
H <sub>2</sub> PO <sub>4</sub> <sup>-</sup>	<i>di</i> hydrogen phosphate	ClO <sub>3</sub> <sup>-</sup>	<b>chlorate</b>	
<b>SULFUR</b>		ClO <sub>2</sub> <sup>-</sup>	<i>chlorite</i>	
S <sup>2-</sup>	sulfide	ClO <sup>-</sup>	<i>hypochlorite</i>	
SO <sub>3</sub> <sup>2-</sup>	<i>sulfite</i>	<b>METALS/SEMI-METALS</b>		<b>di</b> Two or double (i.e., as with dichromate, double the numeric subscripts on the chromate ion and reduce the oxygen by one; retain charge)
HSO <sub>3</sub> <sup>-</sup>	hydrogen sulfite	MnO <sub>4</sub> <sup>-</sup>	permanganate	
SO <sub>4</sub> <sup>2-</sup>	<b>sulfate</b>	CrO <sub>4</sub> <sup>2-</sup>	<b>chromate</b>	
HSO <sub>4</sub> <sup>-</sup>	hydrogen sulfate	Cr <sub>2</sub> O <sub>7</sub> <sup>2-</sup>	<i>dichromate</i>	
S <sub>2</sub> O <sub>3</sub> <sup>2-</sup>	<i>thiosulfate</i>	AsO <sub>4</sub> <sup>3-</sup>	arsenate	
S <sub>2</sub> O <sub>7</sub> <sup>2-</sup>	<i>disulfate</i>	SiO <sub>4</sub> <sup>4-</sup>	silicate	
<b>CARBON</b>				
C <sup>4+</sup>	carbide			
CO <sub>3</sub> <sup>2-</sup>	<b>carbonate</b>			
HCO <sub>3</sub> <sup>-</sup>	hydrogen carbonate (or bicarbonate)			
CN <sup>-</sup>	cyanide			
<b>OTHER COMMON ANIONS</b>		<b>SOME COMBINED IONS</b>		
BO <sub>3</sub> <sup>3-</sup>	borate	HS <sup>-</sup>	hydrogen sulfide	<b>bi</b> An H is present in a polyatomic ion that normally has a 2- or greater charge
BrO <sub>3</sub> <sup>-</sup>	bromate	NH <sub>4</sub> PO <sub>4</sub> <sup>2-</sup>	ammonium phosphate	
IO <sub>3</sub> <sup>-</sup>	<b>iodate</b>	HC <sub>2</sub> O <sub>4</sub> <sup>-</sup>	hydrogen oxalate	
IO <sub>4</sub> <sup>-</sup>	<i>periodate</i>	Fe(CN) <sub>6</sub> <sup>3-</sup>	hexacyanoferrate	<b>thio-</b> Add one sulfur in place of an oxygen
OCN <sup>-</sup>	cyanate			
SCN <sup>-</sup>	<i>thiocyanate</i>			

### Metals with more than one charge

Formula	Stock name	Classical name	Formula	Stock name	Classical name
Cu <sup>+1</sup>	Copper (I) ion	Cuprous ion	Hg <sub>2</sub> <sup>+2</sup>	Mercury (I) ion	Mercurous ion
Cu <sup>+2</sup>	Copper (II) ion	Cupric ion	Hg <sup>+2</sup>	Mercury (II) ion	Mercuric ion
Fe <sup>+2</sup>	Iron (II) ion	Ferrous ion	Pb <sup>+2</sup>	Lead (II) ion	Plumbous ion
Fe <sup>+3</sup>	Iron (III) ion	Ferric ion	Pb <sup>+4</sup>	Lead (IV) ion	Plumbic ion
Sn <sup>+2</sup>	Tin (II) ion	Stannous ion	Cr <sup>+2</sup>	Chromium (II) ion	Chromous ion
Sn <sup>+4</sup>	Tin (IV) ion	Stannic ion	Cr <sup>+3</sup>	Chromium (III) ion	Chromic ion
Co <sup>+2</sup>	Cobalt (II) ion	Cobaltous ion	Mn <sup>+2</sup>	Manganese (II) ion	Manganous ion
Co <sup>+3</sup>	Cobalt (III) ion	Cobaltic ion	Mn <sup>+3</sup>	Manganese (III) ion	Manganic ion