

Lesson 57: Ionic Charges Chart

Chemistry with Lab

Cations

1+		2+		3+		4+	
ammonium	NH ₄ ⁺	barium	Ba ²⁺	aluminum	Al ³⁺	tin(IV)	Sn ⁴⁺
cesium	Cs ⁺	beryllium	Be ²⁺	chromium(III)	Cr ³⁺	nickel (IV)	Ni ⁴⁺
gold(I)	Au ⁺	cadmium	Cd ²⁺	cobalt(III)	Co ³⁺	lead(IV)	Pb ⁴⁺
hydrogen	H ⁺	calcium	Ca ²⁺	gold(III)	Au ³⁺		
lead(I)	Pb ⁺	cobalt(II)	Co ²⁺	iron(III)	Fe ³⁺		
lithium	Li ⁺	copper(II)	Cu ²⁺	manganese(III)	Mn ³⁺		
potassium	K ⁺	iron(II)	Fe ²⁺				
silver	Ag ⁺	lead(II)	Pb ²⁺				
sodium	Na ⁺	magnesium	Mg ²⁺				
copper(I)	Cu ⁺	manganese(II)	Mn ²⁺				
		mercury(I)	Hg ₂ ²⁺				
		mercury(II)	Hg ²⁺				
		nickel(II)	Ni ²⁺				
		strontium	Sr ²⁺				
		zinc	Zn ²⁺				
		tin(II)	Sn ²⁺				

Roman numeral notation indicates charge of ion when element commonly forms more than one ion.

Anions

1-		2-		3-	
acetate	C ₂ H ₃ O ₂ ⁻	carbonate	CO ₃ ²⁻	arsenate	AsO ₄ ³⁻
amide	NH ₂ ⁻	chromate	CrO ₄ ²⁻	arsenite	AsO ₃ ³⁻
bicarbonate*	HCO ₃ ⁻	dichromate	Cr ₂ O ₇ ²⁻	citrate	C ₆ H ₅ O ₇ ³⁻
bisulfate**	HSO ₄ ⁻	oxide	O ²⁻	ferricyanide	Fe(CN) ₆ ³⁻
bisulfide	HS ⁻	oxalate	C ₂ O ₄ ²⁻	nitride	N ³⁻
bisulfite	HSO ₃ ⁻	silicate	SiO ₃ ²⁻	phosphate	PO ₄ ³⁻
bromate	BrO ₃ ⁻	sulfate	SO ₄ ²⁻	phosphite	PO ₃ ³⁻
bromide	Br ⁻	sulfide	S ²⁻	phosphide	P ³⁻
chlorate	ClO ₃ ⁻	sulfite	SO ₃ ²⁻		
chlorite	ClO ₂ ⁻	tartrate	C ₄ H ₄ O ₆ ²⁻		
chloride	Cl ⁻	tetraborate	B ₄ O ₇ ²⁻		
cyanide	CN ⁻	thiosulfate	S ₂ O ₃ ²⁻		
cyanate	OCN ⁻				
fluoride	F ⁻				
hydride	H ⁻				
hydroxide	OH ⁻				
hypochlorite	ClO ⁻				
iodate	IO ₃ ⁻				
iodide	I ⁻				
nitrate	NO ₃ ⁻				
nitrite	NO ₂ ⁻				
perchlorate	ClO ₄ ⁻				
permanganate	MnO ₄ ⁻				
thiocyanate	SCN ⁻				

**There are
no common
anions with
a 4- charge.**

*hydrogen
carbonate

**hydrogen
sulfate