

Polyatomic Ions Reference

41 common ions · grouped by charge · highlighted rows show related -ate / -ite pairs

Cations

Name	Formula	Charge
Ammonium	NH ₄	1+
Hydronium	H ₃ O	1+
Mercury(I)	Hg ₂	2+

1– Anions

Name	Formula	Charge
Acetate	CH ₃ COO	1–
Amide	NH ₂	1–
Azide	N ₃	1–
Bromate	BrO ₃	1–
Chlorate	ClO ₃	1–
Chlorite	ClO ₂	1–
Cyanate	OCN	1–
Cyanide	CN	1–
Dihydrogen phosphate	H ₂ PO ₄	1–
Formate	HCOO	1–
Hydrogen carbonate (bicarbonate)	HCO ₃	1–
Hydrogen sulfate (bisulfate)	HSO ₄	1–
Hydrogen sulfite	HSO ₃	1–
Hydroxide	OH	1–
Hypochlorite	ClO	1–
Iodate	IO ₃	1–
Nitrate	NO ₃	1–
Nitrite	NO ₂	1–
Perbromate	BrO ₄	1–
Perchlorate	ClO ₄	1–
Periodate	IO ₄	1–
Permanganate	MnO ₄	1–
Thiocyanate	SCN	1–

2– Anions

Name	Formula	Charge
Carbonate	CO ₃	2–
Chromate	CrO ₄	2–
Dichromate	Cr ₂ O ₇	2–
Hydrogen phosphate	HPO ₄	2–
Oxalate	C ₂ O ₄	2–
Peroxide	O ₂	2–
Silicate	SiO ₃	2–
Sulfate	SO ₄	2–
Sulfite	SO ₃	2–
Thiosulfate	S ₂ O ₃	2–

3– Anions

Name	Formula	Charge
Arsenate	AsO ₄	3–
Borate	BO ₃	3–
Citrate	C ₆ H ₅ O ₇	3–
Phosphate	PO ₄	3–
Phosphite	PO ₃	3–

Oxyanion naming pattern

For related oxyanions, -ate generally has more oxygen than -ite; per- indicates one more oxygen than -ate, while hypo- indicates one fewer than -ite.