

Review of Molecular Nomenclature and Acids

	Formula	IUPAC Name
1.	$\text{NO}_3(\text{g})$	nitrogen trioxide.
2.	$\text{NH}_3(\text{g})$	ammonia
3.	$\text{H}_2\text{S}(\text{g})$	<del>dihydrogen monosulfide</del> . hydrogen sulfide gas.
4.	$\text{OF}_2$	oxygen difluoride
5.	$\text{CH}_4(\text{g})$	methane
6.	$\text{CH}_3\text{OH}(\text{l})$	Methanol
7.	$\text{HBr}(\text{aq})$	hydrobromic acid.
8.	$\text{H}_2\text{SO}_3(\text{aq})$	sulphurous acid
9.	$\text{CS}_2(\text{l})$	carbon disulfide.
10.	$\text{H}_2\text{S}(\text{aq})$	hydrosulphuric acid
11.	$\text{SO}_2(\text{g})$	sulfur dioxide
12.	$\text{N}_2\text{O}_4$	dinitrogen tetroxide
13.	$\text{HNO}_2(\text{aq})$ nitrite	nitrous acid.
14.	$\text{CO}(\text{g})$	carbon monoxide
15.	$\text{C}_{12}\text{H}_{22}\text{O}_{11}(\text{s})$	sucrose.
16.	$\text{HOCl}(\text{aq})$	hypochlorous acid
17.	$\text{As}_2\text{O}_3$	diarsenic trioxide
18.	$\text{CH}_3\text{OH}$	ethanol
19.	$\text{H}_2\text{CO}_3(\text{aq})$	carbonic acid
20.	$\text{HClO}_4$	perchloric acid
21.	$\text{P}_4\text{O}_{10}(\text{s})$	tetra phosphorus decaoxide
22.	$\text{SO}_3$	sulphur trioxide
23.	$\text{CF}_4(\text{l})$	carbon tetra fluoride.
24.	$\text{SiO}_2$	silicon dioxide
25.	$\text{CH}_3\text{COOH}(\text{aq})$	acetic acid.

ide → ic  
ate → ic  
ite → ous

## Review of Nomenclature

A - acid  
E - element

I - ionic  
M - molecular

	Class	Formula	IUPAC Name
1.	A	$H_3PO_4(aq)$	phosphoric acid
2.	A	$HClO_2(aq)$	chlorous acid
3.	E	$Mg(s)$	magnesium
4.	I	$Al_2(SO_4)_3(s)$	aluminum sulfate
5.	I	$MgCl_2(aq)$	magnesium chloride
6.	I	$NH_4NO_2(s)$	ammonium nitrite
7.	M	$PH_3$	phosphorus trihydride
8.	I	$KNO_3(s)$	potassium nitrate
9.	I	$NaNO_3 \cdot 6H_2O(aq)$	sodium nitrate hexahydrate
10.	A	$HNO_2(aq)$	nitrous acid
11.	I	$Al(OH)_3(s)$	aluminum hydroxide
12.	I	$Na_2SO_4 \cdot 8H_2O(aq)$	sodium sulphate octahydrate
13.	I	$(NH_4)_2SO_4(s)$	ammonium sulfate
14.	I	$PbF_4(s)$	lead (IV) fluoride
15.	M	$H_2O_2(l)$	hydrogen peroxide
16.	I	$PbO(s)$	lead (II) oxide
17.	A	$HF(aq)$	hydrofluoric acid
18.	I	$KClO(s)$	potassium hypochlorite
19.	E	$Br_2(l)$	bromine
20.	M	$N_2O_3(g)$	dinitrogen trioxide
21.	I	$K_2CO_3 \cdot 2H_2O(s)$	potassium carbonate dihydrate
22.	A	$HNO_3(aq)$	nitric acid
23.	A	$HF(g)$	hydrogen monofluoride
24.	I	$NaOH(aq)$	sodium hydroxide
25.	I	$NaHSO_3(s)$	sodium hydrogen sulfite

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ite  $\rightarrow$  ous  
ate  $\rightarrow$  ic

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	Class	Formula	IUPAC Name
26.	I	$MgSO_4 \cdot 8H_2O$	magnesium sulphate octahydrate
27.	I	$Ca(OH)_2(s)$	calcium hydroxide.
28.	I	$AuCl(s)$	gold (I) chloride
29.	I	$CaO(s)$	calcium oxide.
30.	I	$CuSO_4 \cdot 5H_2O$	copper (II) sulphate pentahydrate
31.	E	$S_8(s)$	sulphur
32.	I	$Ca(HCO_3)_2(s)$	calcium hydrogen carbonate
33.	I	$KBr(s)$	potassium bromide.
34.	I	$TiO_2$	titanium (IV) oxide
35.	M	$PCl_5(g)$	phosphorus pentachloride.
36.	I	$NaClO_3(aq)$	sodium chlorate
37.	M.	$N_2H_4(l)$	dinitrogen tetrahydride
38.	M	$HCl(g)$	hydrogen chloride
39.	A	$HClO(aq)$	chloric acid
40.	I	$Li_2S_2O_3$	lithium thiosulphate
41.	M	$B_2H_6(g)$	diboron hexahydride.
42.	M	$NCl_3$	nitrogen trichloride
43.	I	$NaHSO_3$	sodium hydrogen sulphite
44.	E	$Al(s)$	aluminium
45.	A	$HBr(aq)$	hydrobromic acid
46.	E	$Si(s)$	silicon
47.	I	$(NH_4)_3PO_4(aq)$	ammonium phosphate
48.	E	$Xe(g)$	xenon
49.	M	$SF_2(s)$	sulfur difluoride.
50.	I	$Na_2SiO_3(s)$	sodium silicate.