

# IMPORTANT COMPOUNDS AND THEIR FORMULAE

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1. Active nitrogen → Atomic nitrogen
2. Alums →  $MAl(SO_4)_2 \cdot 12H_2O$ ; (M =  $NH_4^+$ ,  $Na^+$ ,  $K^+$  etc.)
3. Amatol → 80%  $NH_4NO_3$  + 20% T.N.T. (explosive)
4. Anhydron →  $Mg(ClO_4)_2$
5. Aqua regia → conc.  $1HNO_3$  + conc.  $3HCl$
6. Arsine →  $AsH_3$
7. Asbestos →  $CaMg_3(SiO_3)_4$
8. Borane → Hydrides of Boron
9. Bremstone →  $S_8$
10. Blue vitriol →  $CuSO_4 \cdot 5H_2O$
11. Bleaching powder →  $Ca(OCl)Cl$
12. Baryta water →  $Ba(OH)_2$  Solution
13. Baryta →  $BaO$



14. Baking powder or Soda →  $\text{NaHCO}_3$
15. Black jack → Zinc ore
16. Calgon →  $\text{Na}_2[\text{Na}_4(\text{PO}_3)_6]$
17. Carborundum →  $\text{SiC}$
18. Caliche → Natural  $\text{NaNO}_3$   
containing  $\text{NaIO}_3$
19. Caustic Soda →  $\text{NaOH}$
20. Caustic potash →  $\text{KOH}$
21. Calomel →  $\text{Hg}_2\text{Cl}_2$
22. Cerussite →  $\text{PbCO}_3$
23. Cementite →  $\text{Fe}_3\text{C}$  (iron carbide)
24. Chrom alum →  $\text{K}_2\text{SO}_4 \cdot \text{Cr}_2(\text{SO}_4)_3 \cdot 24\text{H}_2\text{O}$
25. Chinese white →  $\text{ZnO}$
26. Corrosive sublimate →  $\text{HgCl}_2$
27. D.D.T. → p-dichloro-diphenyl-trichloro-ethene
28. Deuterium → D or  ${}_1\text{H}^2$  (Isotope of hydrogen)
29. Dry ice → Solid  $\text{CO}_2$
30. Fehling's solution → A deep blue solution =  $\text{CuSO}_4 \cdot 5\text{H}_2\text{O} + \text{NaOH} + \text{Na, K-tartrate}$  (used for the test of aldehydes)
31. Feldspar →  $\text{KAlSi}_3\text{O}_8$

32. Fenton's reagent →  $\text{H}_2\text{O}_2$  + few drops of  $\text{FeCl}_3$
33. Freon →  $\text{CF}_2\text{Cl}_2$
34. Ferric alum →  $\text{K}_2\text{SO}_4 \cdot \text{Fe}_2(\text{SO}_4)_3 \cdot 24\text{H}_2\text{O}$
35. Fusion mixture →  $\text{Na}_2\text{CO}_3 + \text{K}_2\text{CO}_3$
36. Fluid magnesia → 12% aqueous soln. of  $\text{Mg}(\text{HCO}_3)_2$
37. Glauber's salt →  $\text{Na}_2\text{SO}_4 \cdot 10\text{H}_2\text{O}$
38. Graphite → An allotrope of carbon
39. Green vitriol →  $\text{FeSO}_4 \cdot 7\text{H}_2\text{O}$
40. Gun powder → 75%  $\text{KNO}_3$ , 12% S, 13% charcoal
41. Heavy hydrogen →  $\text{D}_2$
42. Heavy water →  $\text{D}_2\text{O}$
43. Hydrolith →  $\text{CaH}_2$
44. Hypo →  $\text{Na}_2\text{S}_2\text{O}_3 \cdot 5\text{H}_2\text{O}$
45. Killed spirit →  $\text{ZnCl}_2 + \text{ZnO}$  (Zn-oxy chloride)
46. Kesserite →  $\text{MgSO}_4 \cdot \text{H}_2\text{O}$
47. Leuna saltpetre → Fertilizer [ $\text{NH}_4\text{NO}_3 + (\text{NH}_4)_2\text{SO}_4$ ]
48. Lime or Quick lime →  $\text{CaO}$
49. Lead of pencil → Graphite (C)

50. Lime water → A clear aqueous solution of  $\text{Ca(OH)}_2$
51. Laughing gas →  $\text{N}_2\text{O}$
52. Lunar caustic →  $\text{AgNO}_3$
53. Litharge →  $\text{PbO}$
54. Lithopone → A white pigment ( $\text{ZnS} + \text{BaSO}_4$ )
55. Massicot →  $\text{PbO}$
56. Matte →  $\text{Cu}_2\text{S} + \text{FeS}$
57. Magnesia alba →  $2\text{MgCO}_3 \cdot \text{Mg(OH)}_2 \cdot 3\text{H}_2\text{O}$
58. Magnesia →  $\text{MgO}$
59. Marsh gas → Methane ( $\text{CH}_4$ )
60. Marble →  $\text{CaCO}_3$
61. Micro cosmic salt →  $\text{NaNH}_4\text{HPO}_4$  (used in the test of silicates)
62. Milk of magnesia → A paste of  $\text{Mg(OH)}_2$  in water
63. Mohr's salt →  $\text{FeSO}_4(\text{NH}_4)_2\text{SO}_4 \cdot 6\text{H}_2\text{O}$
64. Muriatic acid →  $\text{HCl}$
65. Milk of lime → Suspension of  $\text{Ca(OH)}_2$  in water
66. Minium →  $\text{Pb}_3\text{O}_4$
67. Nascent hydrogen → Atomic hydrogen
68. Nessler's reagent → Aq. soln. of  $\text{K}_2\text{HgI}_4$



69. Nitro chalk	→ Fertilizer $[\text{NH}_4\text{NO}_3 + (\text{NH}_4)_2\text{CO}_3]$
70. Nitrolim	→ $\text{CaCN}_2$
71. Nitrophos	→ $\text{Ca}(\text{H}_2\text{PO}_4)_2 + 2\text{Ca}(\text{NO}_3)_2$
72. Oil of vitriol	→ conc. $\text{H}_2\text{SO}_4$
73. Ozone	→ $\text{O}_3$
74. Oleum	→ $\text{H}_2\text{S}_2\text{O}_7$
75. Oxygen gas	→ $\text{O}_2$
76. Pharaoh's Serpents	→ $\text{Hg}(\text{CNS})_2$
77. Philosopher's Wool	→ $\text{ZNO}$
78. Phosphine	→ $\text{PH}_3$
79. Phosgene	→ $\text{COCl}_2$
80. Pig iron	→ impure form of iron
81. Potas alum	→ $\text{K}_2\text{SO}_4 \cdot \text{Al}_2(\text{SO}_4)_3 \cdot 24\text{H}_2\text{O}$
82. Producer gas	→ A mixture of $(\text{CO} + \text{N}_2)$
83. Plaster of paris	→ $\text{Ca}(\text{SO}_4)_2 \cdot \text{H}_2\text{O}$
84. Quartz	→ $(\text{SiO}_2)_n$
85. Quick silver	→ $\text{Hg}$
86. Quick lime	→ $\text{CaO}$
87. Red lead	→ $\text{Pb}_3\text{O}_4$
88. Refrigerant	→ $\text{NH}_3, \text{CO}_2, \text{CF}_2\text{Cl}_2$ etc.
89. Rochelle Salt	→ Sodium potassium tartrate

90. Rust  $\rightarrow \text{Fe}_2\text{O}_3 \cdot x\text{H}_2\text{O}$
91. Sorel's Cement  $\rightarrow \text{Mg}(\text{OH})\text{Cl}$
92. Soda-lime  $\rightarrow \text{NaOH} + \text{CaO}$
93. Soda ash or Sal soda  $\rightarrow \text{Na}_2\text{CO}_3$
94. Spathose ore  $\rightarrow \text{FeCO}_3$
95. Salammoniac  $\rightarrow \text{NH}_4\text{Cl}$
96. Slaked lime  $\rightarrow \text{Ca}(\text{OH})_2$
97. Sal volatile (smelling salt)  $\rightarrow (\text{NH}_4)_2\text{CO}_3$
98. Spinel  $\rightarrow \text{MgAl}_2\text{O}_4$
99. Superphosphate  $\rightarrow \text{Ca}(\text{H}_2\text{PO}_4)_2 + 2\text{CaSO}_4$
100. T.N.T.  $\rightarrow$  Tri-nitro toluene (explosive)
101. T.N.B.  $\rightarrow$  Tri-nitro benzene (more powerful explosive than T.N.T.)
102. Tincal  $\rightarrow \text{Na}_2\text{B}_4\text{O}_7 \cdot 10\text{H}_2\text{O}$
103. Talc  $\rightarrow 3\text{MgO} \cdot 4\text{SiO}_2 \cdot \text{H}_2\text{O}$
104. Tritium  $\rightarrow$  T or,  $\text{H}^3$ , an isotope of hydrogen
105. Vermilion  $\rightarrow \text{HgS}$  (red)
106. Water glass  $\rightarrow$  Sodium metasilicate ( $\text{Na}_2\text{SiO}_3$ )
107. Water gas  $\rightarrow \text{CO} + \text{H}_2$



108. Wrought iron → Pure form of iron  
109. White vitriol →  $\text{ZnSO}_4 \cdot 7\text{H}_2\text{O}$   
110. White lead →  $2\text{PbCO}_3 \cdot \text{Pb(OH)}_2$   
111. Zinc white →  $\text{ZnO}$
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