

# Chemical names from [https://someonesdad1.github.io/hobbyutil/project\\_list.html](https://someonesdad1.github.io/hobbyutil/project_list.html)

18 Dec 2009

This list has been constructed from many sources over the past few decades, so I can't attribute each item. Beware of lists from the Internet, as there is a lot of incestuous copying and promulgation of errors. But you already know that...

| Old name                | Chemical name   | Formula                       |
|-------------------------|---|-------------------------------|
| Acetic ether            | Ethyl acetate   | $C_2H_5O_2C_2H_3$             |
| Acetone                 | Dimethyl ketone, 2-propanone  | $OC(CH_3)_2$                  |
| Acid of air             | Carbon dioxide  | $CO_2$                        |
| Acid of ants            | Formic acid   |                               |
| Acid of apples          | Malic acid  |                               |
| Acid of lemon           | Citric acid   |                               |
| Acid of milk            | Lactic acid   |                               |
| Acid of salt            | Hydrochloric acid   | HCl                           |
| Acid of sugar           | Oxalic acid   | $H_2C_2O_4 \cdot H_2O$        |
| Acid potassium sulphate | Potassium bisulphate  | $KHSO_4$                      |
| Acidum saltus           | Hydrochloric acid   | HCl                           |
| Ackey                   | Nitric acid   | $HNO_3$                       |
| Aer urinosa             | Ammonia   |                               |
| Alcali volatil          | Ammonium hydroxide  | $NH_4OH$                      |
| Alcohol sulphuris       | Carbon disulfide  | $CS_2$                        |
| Alcohol, grain          | Ethyl alcohol (ethanol)   | $C_2H_5OH$                    |
| Alcohol, wood           | Methyl alcohol (methanol)   | $CH_3OH$                      |
| Alembroth, salt of      |   | $Hg_2(NH_4)_2Cl_4 \cdot H_2O$ |
| Algaroth, powder of     |   | SbOCl                         |
| Alizarin                | 1,2-dihydroxyanthraquinone, a red dye   | $C_{14}H_8O_4$                |
| Alizarin black          | Naphtharazine, 5,8-dihydroxy-1,4-naphthoquinone, a black dye  | $C_{10}H_6O_4$                |
| Alizarin blue           | A dihydroxyanthraquinone quinoline  | $C_{17}H_9O_4$                |
| Alizarin bordeaux       | 1,2,3-trihydroxyanthraquinone, a dye derived from anthraquinone                                     | $C_{14}H_8O_5$                |
| Alizarin brown          | 1,2,3-trihydroxyanthraquinone, a dye derived from anthraquinone                                     | $C_{14}H_8O_5$                |
| Alizarin red            | Alizarin sodium sulfonate, the sodium salt of the sulfonic acid of alizarin; an acid-base indicator | $NaC_{14}H_7O_7S$             |
| Alizarin yellow         | Sodium <i>p</i> -nitraniline salicylate, an acid-base indicator                                     | $C_{13}H_{10}NO_5$            |
| Alum                    | Aluminum potassium sulfate  | $AlK(SO_4)_2 \cdot 12H_2O$    |
| Alumina                 | Aluminum oxide  | $Al_2O_3$                     |
| Alundum                 | Fused aluminum oxide  | $Al_2O_3$                     |

|                             |   |   |
|-----------------------------|---|---|
| Ammonia                     | Ammonium hydroxide                        | $\text{NH}_4\text{OH}$  |
| Aniline purple              | Mauveine, the first aniline dye           | $\text{C}_{27}\text{H}_{24}\text{N}_4$                                  |
| Anthracene blue             | A dihydroxyanthraquinone quinoline        | $\text{C}_{17}\text{H}_9\text{O}_4$                                     |
| Antichlor                   | Sodium thiosulfate                        | $\text{Na}_2\text{S}_2\text{O}_3 \cdot 5\text{H}_2\text{O}$             |
| Antimony black              | Antimony trisulfide                       | $\text{Sb}_2\text{S}_3$   |
| Antimony bloom              | Antimony oxide                            | $\text{Sb}_2\text{O}_3$   |
| Antimony flowers            | antimony oxysulphide                      | $\text{Sb}_2\text{S}_3 + \text{Sb}_2\text{O}_3$                         |
| Antimony glance             | Stibnite, antimony sulfide mineral        | $\text{Sb}_2\text{S}_3$   |
| Antimony ochre              | Stibiconite, an antimony mineral          | $\text{Sb}_2\text{O}_3(\text{OH})_2$                                    |
| Antimony red                | antimony oxysulphide                      | $\text{Sb}_2\text{S}_3 + \text{Sb}_2\text{O}_3$                         |
| Antimony vermilion          | antimony oxysulphide                      | $\text{Sb}_2\text{S}_3 + \text{Sb}_2\text{O}_3$                         |
| Aqua ammonia                | Ammonium hydroxide solution               | $\text{NH}_4\text{OH} + \text{H}_2\text{O}$                             |
| Aqua fortis                 | Nitric acid                               | $\text{HNO}_3$  |
| Aqua regia                  | Nitric & hydrochloric acid                | $\text{HNO}_3 + \text{HCl}$   |
| Aqua vitae                  | Aqueous ethanol                           | $\text{C}_2\text{H}_5\text{OH}$   |
| Argentum                    | Silver                                    | Ag  |
| Arnaudon's green            | Chromium phosphate                        | $\text{CrPO}_4$   |
| Aromatic spirits of ammonia | Ammonia gas in alcohol                    | ...   |
| Arsenic glass               | Arsenic trioxide                          | $\text{As}_4\text{O}_6$   |
| Asbestos                    | Magnesium silicate                        | $\text{Mg}_3\text{Si}_2\text{O}_7 \cdot 2\text{H}_2\text{O}$            |
| Ascorbic acid               | Vitamin C                                 | $\text{C}_6\text{H}_8\text{O}_6$  |
| Aspirin                     | Acetylsalicylic acid                      | $\text{C}_2\text{H}_3\text{O}_2\text{C}_6\text{H}_4\text{CO}_2\text{H}$ |
| Aurum                       | Gold                                      | Au  |
| Azotic air                  | Nitrogen                                  | $\text{N}_2$  |
| Azurite                     | Mineral form of basic copper carbonate    | $\text{CuCO}_3$   |
| Baker's salt                | Ammonium carbonate                        | $(\text{NH}_4)_2\text{CO}_3$  |
| Baking soda                 | Sodium bicarbonate                        | $\text{NaHCO}_3$  |
| Banana oil                  | Amyl acetate                              | $\text{CH}_3\text{CO}_2\text{C}_5\text{H}_{11}$                         |
| Barilla                     | Impure sodium carbonate                   |   |
| Barium white                | Barium sulfate                            | $\text{BaSO}_4$   |
| Barium white                | Barium sulfate                            | $\text{BaSO}_4$   |
| Baryta                      | Barium oxide                              | BaO   |
| Bauxite                     | Impure aluminum oxide                     | $\text{Al}_2\text{O}_3$   |
| Benzal green                | Triphenylmethane dye, acid-base indicator | $\text{C}_{23}\text{H}_{25}\text{N}_2\text{Cl}$                         |

|                        |  |                            |
|------------------------|--|----------------------------|
| Benzine                | Ligroin or petroleum ether; sometimes benzene  |                            |
| Benzol                 | Benzene  | $C_6H_6$                   |
| Bicarbonate of soda    | Sodium hydrogen carbonate or sodium bicarbonate  | $NaHCO_3$                  |
| Bichloride of mercury  | Mercuric chloride  | $HgCl_2$                   |
| Bichrome               | Potassium dichromate   | $K_2Cr_2O_7$               |
| Bismuth ochre          | Bismite  | $Bi_2O_3 \cdot 3H_2O$      |
| Bitter salt            | Magnesium sulfate (Epsom salts)  | $MgSO_4 \cdot 7H_2O$       |
| Bitter salt            | Magnesium sulphate   | $MgSO \cdot 7H_2O$         |
| Black ash              | Impure sodium carbonate mixed with unburnt carbon  |                            |
| Black ash              | Crude form of sodium carbonate   | $Na_2CO_3$                 |
| Black lead             | Graphite   | C                          |
| Black oxide of copper  | Cupric oxide   | CuO                        |
| Black oxide of mercury | Mercurous oxide  | $Hg_2O$                    |
| Black precipitate      | A black powder   | $Hg_2O \cdot Hg_2NH_2NO_3$ |
| Black silver           | Stephanite, a silver antimony sulfide mineral  | $5Ag_2S \cdot Sb_2S$       |
| Blanc-fixe             | Barium sulfate   | $BaSO_4$                   |
| Bleaching powder       | Formed by passing chlorine gas over dry calcium hydroxide; with water, it is a mixture of $CaCl_2$ and $Ca(OCl)_2$ . |                            |
| Bleaching powder       | Calcium hypochlorite   | $CaOCl_2$                  |
| Blue copperas          | Copper sulfate   | $CuSO_4 \cdot 5H_2O$       |
| Blue lead              | Lead sulfate   | $PbSO_4$                   |
| Blue salts             | Nickel sulfate   | $NiSO_4 \cdot 7H_2O$       |
| Blue stone             | Copper sulfate   | $CuSO_4 \cdot 5H_2O$       |
| Blue vitriol           | Copper sulfate   | $CuSO_4 \cdot 5H_2O$       |
| Bogore                 | Bog iron ore   | $2Fe_2O_3 \cdot 3H_2O$     |
| Bone ash               | Impure calcium carbonate   | $CaCO_3 + ?$               |
| Bone black             | Impure charcoal from bones and blood   |                            |
| Boracic acid           | Boric acid   | $H_3BO_3$                  |
| Borax                  | Sodium borate  | $Na_2B_4O_7 \cdot 10H_2O$  |
| Bremen blue            | Copper carbonate   |                            |
| Brimstone              | Sulfur   | S                          |
| Brine                  | Strong NaCl solution   | $NaCl + H_2O$              |
| Brown ochre            | Bog iron ore   | $2Fe_2O_3 \cdot 3H_2O$     |
| Brunswick green        | Copper oxychloride or copper carbonate   | $CuOCl \cdot Cu(OH)_2$     |

|                          |   |  |
|--------------------------|---|--|
| Burnt alum               | Anhydrous potassium aluminum sulfate    | ...  |
| Burnt lime               | Calcium oxide                           | CaO  |
| Burnt ochre              | Ferric oxide                            | Fe <sub>2</sub> O <sub>3</sub>                         |
| Burnt ore                | Ferric oxide                            | Fe <sub>2</sub> O <sub>3</sub>                         |
| Butter of antimony       | Antimony trichloride                    | SbCl <sub>3</sub>                                      |
| Butter of tin            | Anhydrous stannous chloride             | SnCl <sub>4</sub> + 5H <sub>2</sub> O                  |
| Butter of X              | Chloride or trichloride of X            | ...  |
| Butter of zinc           | Zinc chloride + 1/4 its weight in water | ZnCl <sub>2</sub> + H <sub>2</sub> O                   |
| Calcareous earth         | Calcium oxide                           | CaO  |
| Caliche                  | Impure sodium nitrate                   | NaNO <sub>3</sub>                                      |
| Calomel                  | Mercurous chloride                      | Hg <sub>2</sub> Cl <sub>2</sub>                        |
| Carbolic acid            | Phenol                                  | C <sub>6</sub> H <sub>5</sub> OH                       |
| Carbonate of lime        | Calcium carbonate                       | CaCO <sub>3</sub>                                      |
| Carbonic acid            | Carbon dioxide                          | CO <sub>2</sub>  |
| Carbonic acid gas        | Carbon dioxide                          | CO <sub>2</sub>  |
| Carburetted hydrogen     | Methane                                 | CH <sub>4</sub>  |
| Caro's acid              | Permonosulfuric acid                    | H <sub>2</sub> SO <sub>5</sub>                         |
| Cassel yellow            | Lead oxychloride                        | PbCl <sub>2</sub> ·2PbO                                |
| Caustic earth            | Calcium hydroxide                       | Ca(OH) <sub>2</sub>                                    |
| Caustic lime             | Calcium hydroxide                       | Ca(OH) <sub>2</sub>                                    |
| Caustic potash           | Potassium hydroxide                     | KOH  |
| Caustic soda             | Potassium hydroxide                     | KOH  |
| Caustic vegetable alkali | Potassium hydroxide                     | KOH  |
| Ceruse                   | Lead carbonate                          | 2PbCO <sub>3</sub> ·Pb(OH) <sub>2</sub>                |
| Chalk                    | Calcium carbonate                       | CaCO <sub>3</sub>                                      |
| Chamber crystals         | Nitrosyl sulfate                        | NO·HSO <sub>4</sub>                                    |
| Chile nitre              | Sodium nitrate                          | NaNO <sub>3</sub>                                      |
| Chile saltpeter          | Sodium nitrate                          | NaNO <sub>3</sub>                                      |
| Chinese red              | Basic lead chromate                     | PbCrO <sub>4</sub>                                     |
| Chinese white            | Zinc oxide                              | ZnO  |
| Chloride of lime         | Calcium hypochlorite                    | Ca(ClO) <sub>2</sub>                                   |
| Chloride of soda         | Sodium hypochlorite                     | NaOCl  |
| Chlorinated lime         | Bleaching powder                        |  |
| Chloroform               | Trichloromethane                        | CHCl <sub>3</sub>                                      |
| Chrome alum              | Chromium potassium sulfate              | CrK(SO <sub>4</sub> ) <sub>3</sub> ·12H <sub>2</sub> O |
| Chrome green             | Chromium oxide                          | Cr <sub>2</sub> O <sub>3</sub>                         |
| Chrome red               | Lead chromate                           | PbCrO <sub>4</sub> ·PbO                                |

|                          |   |   |
|--------------------------|---|---|
| Chrome yellow            | Lead chromate   | $\text{PbCrO}_4$  |
| Chromic acid             | Chromium trioxide   | $\text{CrO}_3$  |
| Cinnabar                 | Mercury sulfide, a red pigment  | $\text{HgS}$  |
| Cobalt blue              | A pigment containing cobalt oxide, $\text{CoO}$ , zinc oxide, $\text{Zn}$ , and chalcedony, an amorphous quartz, $\text{SiO}_2$ |   |
| Cobalt green             | A green pigment, solid solution of cobalt and zinc oxides, $\text{CoO}$ and $\text{ZnO}$  |   |
| Cobalt red               | Erythrite, a native cobalt arsenate   | $\text{Co}_3(\text{AsO}_4)_2 \cdot 8\text{H}_2\text{O}$                       |
| Cobalt violet            | Cobalt phosphate, a pigment in oil paints   | $\text{Co}_3(\text{PO}_4)_2 \cdot 2\text{H}_2\text{O}$                        |
| Cobalt yellow            | Cobalt potassium nitrite  | $\text{K}_3\text{Co}(\text{NO}_2)_6 \cdot x\text{H}_2\text{O}$                |
| Colcothar                | Iron oxide (Paris red)  | $\text{Fe}_2\text{O}_3$   |
| Columbium                | Niobium   | $\text{Nb}$   |
| Concrete volatile alkali | Ammonium carbonate  | $(\text{NH}_4)_2\text{CO}_3$  |
| Congo blue               | Blue dye  | $\text{C}_{17}\text{H}_{12}\text{N}_3\text{O}_7\text{S}_2\text{Na}_2$         |
| Congo red                | Red dye   | $\text{C}_{32}\text{H}_{22}\text{N}_6\text{O}_6\text{S}_2\text{Na}_2$         |
| Congo yellow             | Orange-red dye  | $\text{C}_{24}\text{H}_{18}\text{O}_4\text{N}_5\text{SNa}$                    |
| Copperas                 | Ferrous sulfate   | $\text{FeSO}_4 \cdot 7\text{H}_2\text{O}$                                     |
| Corrosive sublimate      | Mercuric chloride   | $\text{HgCl}_2$   |
| Corundum                 | Aluminum oxide  | $\text{Al}_2\text{O}_3$   |
| Coupler's blue           | Blue dye  | $\text{C}_{24}\text{H}_{18}\text{N}_2$  |
| Cream of tartar          | Potassium bitartrate purified into small white crystals   | $\text{KHC}_4\text{H}_4\text{O}_6$  |
| Creech                   | Calcium sulfate   | $\text{CaSO}_4$   |
| Cremor tartari           | Tartar purified into small white crystals   | $\text{KHC}_4\text{H}_4\text{O}_6$  |
| Cresol purple            | <i>m</i> -cresolsulfonphthalein, acid-base indicator  | $\text{C}_{21}\text{H}_{18}\text{O}_5\text{S}$                                |
| Cresol red               | <i>o</i> -cresolsulfonphthalein, acid-base indicator  | $\text{C}_{21}\text{H}_{18}\text{O}_5\text{S}$                                |
| Crocus                   | A yellow or reddish powdered calx (oxide)   |   |
| Crocus of antimony       | Impure antimony oxysulfide  |   |
| Crocus of copper         | Cuprous oxide   | $\text{Cu}_2\text{O}$   |
| Crocus of iron           | Iron sesquioxide or peroxide  |   |
| Crocus of lead           | Red lead  |   |
| Crocus powder            | Ferric oxide  | $\text{Fe}_2\text{O}_3$   |
| Crystal carbonate        | Sodium carbonate  | $\text{Na}_2\text{CO}_3$  |
| Cyanocobalamin           | Vitamin $\text{B}_{12}$   | $\text{C}_{63}\text{H}_{90}\text{CoN}_{14}\text{O}_{14}\text{P}$              |
| DDT                      | Dichlorodiphenyltrichloroethane   | $(\text{C}_6\text{H})^*\text{Cl}_2^*\text{CH}^*\text{CCl}_3$                  |
| Dechlor                  | Sodium thiophosphate  | $\text{Na}_3(\text{PO}_3)_3\text{S} \cdot x\text{H}_2\text{O}$ ,<br>$x=12-18$ |
| Diamine blue             | Blue dye  | $\text{C}_{17}\text{H}_{12}\text{N}_3\text{O}_7\text{S}_2\text{Na}_2$         |
| Diamond                  | Carbon crystal  | $\text{C}$  |

|                        |  |  |
|------------------------|--|--|
| Diuretic salt          | Potassium acetate  | $\text{KC}_2\text{H}_3\text{O}$                                      |
| Dry ice                | Solid carbon dioxide   | $\text{CO}_2$  |
| Dutch liquid           | Ethylene dichloride  | $\text{CH}_2\text{Cl}\cdot\text{CH}_2\text{Cl}$                      |
| Dutch oil              | Ethylene chloride  | $\text{C}_2\text{H}_4\text{Cl}_2$                                    |
| Dydymium Earth         | Mixture of Pr and Nd<br>A metal oxide  |  |
| Emery powder           | Impure aluminum oxide  | $\text{Al}_2\text{O}_3$  |
| Epsom salts            | Magnesium sulfate  | $\text{MgSO}_4\cdot 7\text{H}_2\text{O}$                             |
| Ethanol                | Ethyl alcohol  | $\text{C}_2\text{H}_5\text{OH}$                                      |
| Ether                  | Ethyl ether  | $(\text{C}_2\text{H}_5)_2\text{O}$                                   |
| Ethiops mineral        | Mercury sulfide  | $\text{Hg}_2\text{S}$  |
| Ethyl gas              | Leaded gasoline (i.e., includes tetraethyllead $(\text{C}_2\text{H}_5)_4\text{Pb}$ as an additive) |  |
| Everitt's salt         | Potassium ferrous ferrocyanide   | $\text{K}_2\text{Fe}[\text{Fe}(\text{CN})_6]$                        |
| Farina                 | Starch   | Complex carbohydrate   |
| Ferro prussiate        | Potassium ferricyanide   | $\text{K}_3\text{Fe}(\text{CN})_6$                                   |
| Ferrum                 | Iron   | Fe   |
| Fixed vegetable alkali | Crude or purified potassium carbonate  | $\text{K}_2\text{CO}_3$  |
| Fixed white            | Barium sulfate   | $\text{BaSO}_4$  |
| Flores Martes          | Anhydrous ferric chloride  | $\text{Fe}_2\text{Cl}_6$   |
| Flores martiales       | Ferriammonium chloride   | $\text{NH}_4\text{FeCl}_4$   |
| Flowers of sulphur     | Sulfur   | S  |
| Flowers of X           | Oxide of X (X is usually a metal)  | ...  |
| Fluor, fluorspar       | Calcium fluoride   | $\text{CaF}_2$   |
| Fluorspar              | Natural calcium fluoride   | $\text{CaF}_2$   |
| Folic acid             | Vitamin B <sub>c</sub>   | $\text{C}_{19}\text{H}_{19}\text{N}_7\text{O}_6$                     |
| Formalin               | Formaldehyde   | $\text{HCOH}$  |
| Fossil alkali          | Sodium carbonate   |  |
| French chalk           | Natural magnesium silicate   | $\text{H}_2\text{Mg}_3(\text{SiO}_3)_4$                              |
| French vergidris       | Basic copper acetate   | $\text{Cu}(\text{C}_2\text{H}_3\text{O}_2)_2\cdot\text{H}_2\text{O}$ |
| Fulminating silver     | Silver nitride   | $\text{Ag}_3\text{N}$  |
| Galena                 | Natural lead sulfide   | PbS  |
| Glacial                | Glass-like, crystalized  |  |
| Glance                 | Mineral with a glassy appearance   |  |
| Glauber's salt         | Sodium sulfate   | $\text{Na}_2\text{SO}_4\cdot 10\text{H}_2\text{O}$                   |
| Glucinium or glucinum  | Beryllium  | Be   |
| Grain alcohol          | Ethyl alcohol  | $\text{C}_2\text{H}_5\text{OH}$                                      |
| Green lion             | Iron sulfate   | $\text{FeSO}_4$  |

|                       |  |  |
|-----------------------|--|--|
| Green salt            | Uranium fluoride   | $\text{UF}_4$  |
| Green verditer        | Basic copper carbonate   | $\text{CuCO}_3$  |
| Green vitriol         | Ferrous sulfate  | $\text{FeSO}_4 \cdot 7\text{H}_2\text{O}$  |
| Gun cotton            | Cellulose nitrate  | $\text{C}_6\text{H}_8(\text{NO}_2)_2\text{O}_5$  |
| Gypsum                | Natural calcium sulfate  | $\text{CaSO}_4 \cdot 5\text{H}_2\text{O}$  |
| Hahnemann's mercury   | A black powder   | $\text{Hg}_2\text{O} \cdot \text{Hg}_2\text{NH}_2\text{NO}_3$  |
| Hard oil              | Boiled linseed oil   | ...  |
| Heavy spar            | Barium sulfate   | $\text{BaSO}_4$  |
| Hepar                 | Sulfide  |  |
| Hepatic air           | Hydrogen sulfide   | $\text{H}_2\text{S}$   |
| Hepatic air           | Hydrogen sulfide   | $\text{H}_2\text{S}$   |
| Homborg's salt        | Boric acid   | $\text{B}(\text{OH})_3$  |
| Horn silver           | Native silver chloride   | $\text{AgCl}$  |
| Hydrargyrum           | Mercury  | $\text{Hg}$  |
| Hydrated lime         | Calcium hydroxide  | $\text{Ca}(\text{OH})_2$   |
| Hydrocyanic acid      | Hydrogen cyanide   | $\text{HCN}$   |
| Hypo                  | Sodium thiosulfate   | $\text{Na}_2\text{S}_2\text{O}_3 \cdot 5\text{H}_2\text{O}$  |
| Indian red            | Ferric oxide   | $\text{Fe}_2\text{O}_3$  |
| Iron perchloride      | Ferric chloride  | $\text{FeCl}_3 \cdot 6\text{H}_2\text{O}$  |
| Iron perntrate        | Ferric nitrate   | $\text{Fe}(\text{NO}_3)_3 \cdot 9\text{H}_2\text{O}$   |
| Iron persulphate      | Ferric sulfate   | $\text{Fe}(\text{SO}_4)_3 \cdot n\text{H}_2\text{O}$   |
| Iron protochloride    | Ferrous chloride   | $\text{FeCl}_2 \cdot 4\text{H}_2\text{O}$  |
| Isinglass             | Agar-agar gelatin  | ...  |
| Javelle water         | Originally potassium hypochlorite solution, now usually sodium hypochlorite                | Originally $\text{KOCI} + \text{H}_2\text{O}$ , now $\text{NaOCl} + \text{H}_2\text{O}$                        |
| Jeweler's etchant     | 3 g silver nitrate + 3 g nitric acid + 3 g mercurous nitrate + 100 cc $\text{H}_2\text{O}$ | $\text{HgNO}_3 \cdot \text{H}_2\text{O} + \text{AgNO}_3 + \text{HNO}_3 + \text{H}_2\text{O}$                   |
| Jeweler's rouge       | Ferric oxide   | $\text{Fe}_2\text{O}_3$  |
| K.N.S. solution       | 10 g ammonium carbonate + 20 g ammonium peroxydisulphide + 200 cc ammonium hydroxide       | $\text{NH}_4\text{CO}_3 \cdot \text{H}_2\text{O} + (\text{NH}_4)_2\text{S}_2\text{O}_8 + \text{NH}_4\text{OH}$ |
| Kalium                | Potassium  | $\text{K}$   |
| Killed spirits        | Zinc chloride  | $\text{ZnCl}_2$  |
| King's yellow         | Arsenic sulfide  | $\text{As}_2\text{S}_3$  |
| Kurrol's salt         | Potassium phosphate  | $(\text{KPO}_3)_4$   |
| Labarraque's solution | Sodium hypochlorite solution   | $\text{NaOCl} + \text{H}_2\text{O}$  |
| Lampblack             | Crude form of carbon, charcoal   | $\text{C}$   |
| Lapis causticus       | Fused sodium or potassium hydroxide  |  |

|                            |   |  |
|----------------------------|---|--|
| Lapis imperialis           | Silver nitrate  | $\text{AgNO}_3$  |
| Lapis lunarius             | Fused silver nitrate  | $\text{AgNO}_3$  |
| Laughing gas               | Nitrous oxide   | $\text{N}_2\text{O}$   |
| Lead black                 | Graphite  | C  |
| Lead peroxide              | Lead dioxide  | $\text{PbO}_2$   |
| Lead protoxide             | Lead oxide  | $\text{PbO}$   |
| Lead white                 | Lead carbonate  | $2\text{PbCO}_3 \cdot \text{Pb(OH)}_2$                           |
| Lead, red                  | Lead oxide  | $\text{Pb}_3\text{O}_4$  |
| Leipzig yellow             | Lead chromate   | $\text{PbCrO}_4$   |
| Libavius, fuming liquor of | Tin tetrachloride   | $\text{SnCl}_4$  |
| Lime                       | Calcium oxide   | $\text{CaO}$   |
| Lime, slaked               | Calcium hydroxide   | $\text{Ca(OH)}_2$  |
| Lime, unslaked             | Calcium oxide   | $\text{CaO}$   |
| Limewater                  | Calcium hydroxide solution                                  | $\text{Ca(OH)}_2 + \text{H}_2\text{O}$                           |
| Liquor ammonia             | Ammonium hydroxide solution                                 | $\text{NH}_4\text{OH}$   |
| Litharge                   | Lead oxide  | $\text{PbO}$   |
| Lithopone                  | Zinc sulfide + barium sulfate                               | $\text{ZnS} + \text{BaSO}_4$                                     |
| Liver of sulphur           | Melted potassium carbonate + sulphur                        | $\text{K}_2\text{CO}_3 + \text{S}$                               |
| Lunar caustic              | Silver nitrate  | $\text{AgNO}_3$  |
| Lye                        | Potassium hydroxide solution                                | $\text{KOH}$   |
| Magnesia                   | Magnesium oxide   | $\text{MgO}$   |
| Magnesia alba levis        | Magnesium carbonate and magnesium oxide                     | $4\text{MgCO}_3 \cdot \text{Mg(OH)}_2 \cdot 5\text{H}_2\text{O}$ |
| Magnesia nigra             | Pyrolusite, natural manganese dioxide                       | $\text{MnO}_2$   |
| Magnesite                  | Magnesium carbonate   | $\text{MgCO}_3$  |
| Magnus salt                | Tetrammineplatinum tetrachloroplatinate                     | $\text{Pt(NH}_3)_4\text{PtCl}_4$                                 |
| Malachite green            | Copper carbonate  | $\text{Cu}_2(\text{OH})_2\text{CO}_3$                            |
| Manganese black            | Manganese dioxide   | $\text{MnO}_2$   |
| Manganese green            | Barium manganate  | $\text{BaMnO}_4$   |
| Manganese red              | Rhodonite $\text{MnSiO}_3$ or rhodochrosite $\text{MnCO}_3$ |  |
| Marble                     | Calcium carbonate   | $\text{CaCO}_3$  |
| Marignac salt              | Potassium tin sulfate                                       | $\text{K}_2\text{Sn(SO}_4)_2$                                    |
| Marine acid                | Hydrochloric acid   | $\text{HCl}$   |
| Marine alkali              | Sodium carbonate  |  |
| Marsh gas                  | Methane   | $\text{CH}_4$  |
| Martius yellow             | The calcium salt of naphthalene yellow                      |  |
| Massicot                   | Lead oxide (yellow)   | $\text{PbO}$   |
| Mercurial nitre            | Mercuric nitrate  | $\text{Hg(NO}_3)_2$  |



|                             |   |   |
|-----------------------------|---|---|
| Mercurius calcinatus per se | Mercuric oxide  | HgO                                     |
| Mercury oxide, black        | Mercury(II) oxide   | HgO                                     |
| Metanil yellow              | Sodium salt of 4'-aniline azobenzenesulfonic acid, an acid-base indicator   | $C_{12}H_{10}N_3O_3SNa$                 |
| Methanol                    | Methyl alcohol  | $CH_3OH$                                |
| Methyl green                | A triphenylmethane dye and acid-base indicator  | $C_{25}H_{30}N_3Cl$                     |
| Methyl orange               | Sodium <i>p</i> -dimethylaminobenzenesulfonate, an acid-base indicator  | $C_{14}H_{14}O_3N_3SNa$                 |
| Methyl red                  | <i>o</i> -dimethylaminoazobenzenecarboxylic acid, an acid-base indicator  | $C_{15}H_{15}O_2N_3$                    |
| Methylated spirits          | Methyl alcohol  | $CH_3OH$                                |
| Methylene blue              | 3,9-bisdimethylaminophenazothionium chloride trihydrate, an acid-base indicator   | $C_{16}H_{18}N_3SCl \cdot 3H_2O$        |
| Microcosmic salt            | Sodium ammonium phosphate   | $NaNH_4HPO_4 \cdot 4H_2O$               |
| Mild earth                  | Calcium carbonate   | $CaCO_3$                                |
| Mild vegetable alkali       | Crude or purified potassium carbonate   | $K_2CO_3$                               |
| Milk of barium              | Barium hydroxide + water  | $Ba(OH)_2$                              |
| Milk of bismuth             | Bismuth nitrates + water  | $Bi(OH)_2NO_3$ and/or<br>$BiOH(NO_3)_2$ |
| Milk of lime                | Calcium hydroxide + water   | $Ca(OH)_2$                              |
| Milk of magnesia            | Magnesium hydroxide + water   | $Mg(OH)_2$                              |
| Milk of sulfur              | Precipitated sulfur   | S                                       |
| Millon's base               | Formed from a solution of mercuric oxide in ammonium chloride   | $(HOHg)_2NH_2OH$                        |
| Mineral alkali, common      | Hydrated sodium carbonate   |   |
| Mineral dye blue            | A blue copper or tungsten ore, or a mixture of ferri ferrocyanoide, $Fe_4[Fe(CN)_6]_3$ , with calcium or barium sulfate |   |
| Mineral dye green           | Copper carbonate  |   |
| Mineral dye purple          | Reddish iron oxide pigment  |   |
| Mineral dye white           | Hydrated calcium sulfate  |   |
| Mineral dye yellow          | Lead oxychloride  | $PbCl_2 \cdot 2PbO$                     |
| Minium                      | Red lead oxide  | $Pb_3O_4$                               |
| Mohr salt                   | Ferrous ammonium sulfate  | $(NH_4)_2Fe(SO_4)_2 \cdot 6H_2O$        |
| Molybdic ochre              | Molybdite, yellow molybdenum oxide  | $MoO_3$                                 |
| Monsel salt                 | Iron sub-sulfate  | $Fe_4(SO_4)_5O$                         |
| Monthier blue               | Blue pigment  | $FeNH_4[Fe(CN)_6]$                      |
| Mosaic gold                 | Tin sulfide pigment   | $SnS_2$                                 |
| Muriate of lime             | Calcium chloride  | $CaCl_2$                                |
| Muriate of mercury          | Mercuric chloride   | $HgCl_2$                                |

|                       |  |                             |
|-----------------------|--|-----------------------------|
| Muriate of X          | Chloride of X  | ...                         |
| Muriatic acid         | Hydrochloric acid  | HCl                         |
| Muriatic ether        | Ethyl chloride   | $C_2H_5Cl$                  |
| Mustard gas           | A di(chloroethyl)sulfide   | $(ClCH_2CH_2)_2S$           |
| Naphthalene yellow    | A dinitro 1-naphthol   | $C_{10}H_5(NO_2)_2OH$       |
| Naples yellow         | Lead antimoniate, a yellow pigment   | $Pb_3(SbO_4)_2$             |
| Natron                | Sodium carbonate   | $Na_2CO_3$                  |
| Natural gas           | Mostly methane   | $CH_4$                      |
| Neutral red           | Dimethyldiaminotoluphenazine hydrochloride, an acid-base indicator   |                             |
| Niacin                | Vitamin B <sub>3</sub>   | $C_6H_5NO_2$                |
| Niagra blue           | Blue dye   | $C_{17}H_{12}N_3O_7S_2Na_2$ |
| Nickel bloom          | Annabergite, a green mineral   | $Ni_3As_2O_2 \cdot 8H_2O$   |
| Nickel ochre          | Annabergite, a green mineral   | $Ni_3As_2O_2 \cdot 8H_2O$   |
| Nicotinic acid        | Vitamin B <sub>3</sub>   | $C_6H_5NO_2$                |
| Nile blue             | Aniline dye and acid-base indicator  | $C_{20}H_{19}ON_3$          |
| Niter                 | Potassium nitrate  | $KNO_3$                     |
| Niton                 | Radon  | Rn                          |
| Nitrate of silver     | Silver nitrate   | $AgNO_3$                    |
| Nitre                 | Potassium nitrate  | $KNO_3$                     |
| Nitre or niter        | Potassium nitrate  | $KNO_3$                     |
| Nitric ether          | Ethyl nitrate  | $C_2H_5NO_3$                |
| Nitrous air           | Nitric dioxide (laughing gas)  | $N_2O$                      |
| Nitrous ether         | Ethyl nitrite  | $C_2H_5NO_2$                |
| Nitrous ether         | Ethyl nitrite  | $C_2H_5NO_2$                |
| Nordhausen acid       | Fuming sulfuric acid; i.e. a solution of sulfur trioxide, $SO_3$ , in concentrated (about 98%) sulfuric acid | $H_2SO_4 + SO_3$            |
| Norwegian nitre       | Calcium nitrate  | $Ca(NO_3)_2$                |
| Oil of ants           | Furfural   | $C_5H_4O_2$                 |
| Oil of apples         | Amyl valerate (n-pentyl pentanoate)  | $C_4H_9COC_5H_{11}$         |
| Oil of bananas        | n-pentyl acetate   | $CH_3COC_5H_{11}$           |
| Oil of bitter almonds | Benzaldehyde   | $C_6H_5CHO$                 |
| Oil of cognac         | Ethyl hexyl ether (enanthic ether)   | $C_6H_{13}OC_2H_5$          |
| Oil of garlic         | Allyl sulfide  | $(C_3H_5)_2S$               |
| Oil of glonoin        | Nitroglycerin  | $C_3H_5N_3O_9$              |
| Oil of mars           | Deliquescent anhydrous ferric chloride   | $FeCl_3 + H_2O$             |

|                            |   |  |
|----------------------------|---|--|
| Oil of mirbane             | Nitrobenzene  | $\text{C}_6\text{H}_5\text{NO}_2$  |
| Oil of mustard, artificial | Allyl isothiocyanate  | $\text{C}_3\text{H}_5\text{NCS}$   |
| Oil of pears               | n-pentyl acetate  | $\text{CH}_3\text{COC}_5\text{H}_{11}$   |
| Oil of pineapple           | Ethyl butyrate  | $\text{C}_3\text{H}_7\text{COOC}_2\text{H}_5$                                  |
| Oil of tartar              | A saturated solution of potassium carbonate   | $\text{K}_2\text{CO}_3$  |
| Oil of vitriol             | Sulfuric acid   | $\text{H}_2\text{SO}_4$  |
| Oil of wintergreen         | Methyl salicylate   | $\text{C}_6\text{H}_4\text{OHCOOCH}_3$   |
| Olefiant gas               | Ethene  | $\text{C}_2\text{H}_4$   |
| Oleum                      | Fuming sulfuric acid; i.e. a solution of sulfur trioxide, $\text{SO}_3$ , in concentrated (about 98%) sulfuric acid | $\text{H}_2\text{SO}_4 + \text{SO}_3$  |
| Orpiment                   | Arsenic trisulfide  | $\text{As}_2\text{S}_3$  |
| Orthophosphoric acid       | Phosphoric acid   | $\text{H}_3\text{PO}_4$  |
| Oxygenated muriatic acid   | Chlorine  | $\text{Cl}_2$  |
| Oxymuriate of mercury      | Mercuric chloride   | $\text{HgCl}_2$  |
| Oxymuriate of potassium    | Potassium chlorate  | $\text{KClO}_3$  |
| Oxymuriatic acid           | Chlorine  | $\text{Cl}_2$  |
| Paris blue                 | Ferric ferrocyanide,  | $\text{Fe}_7(\text{CN})_{18}(\text{H}_2\text{O})_x$ where $14 \leq x \leq 16$  |
| Paris green                | Copper aceto-arsenite   | $3\text{Cu}(\text{AsO}_2)_2 \cdot \text{Cu}(\text{C}_2\text{H}_3\text{O}_2)_2$ |
| Paris red                  | Red lead oxide  | $\text{Pb}_3\text{O}_4$  |
| Paris white                | Powdered calcium carbonate  | $\text{CaCO}_3$  |
| Paris yellow               | Lead chromate   | $\text{PbCrO}_4$   |
| Patent yellow              | Lead oxychloride  | $\text{PbO} \cdot \text{PbCl}_2$   |
| Pear essence               | Isoamyl acetate, also called banana oil   | $\text{C}_7\text{H}_{14}\text{O}_2$  |
| Pearl ash                  | Impure calcined potassium carbonate   | $\text{K}_2\text{CO}_3$  |
| Péligot's salt             | Potassium chlorochromate  | $\text{KCrO}_3\text{Cl}$   |
| Perkin's mauve             | Mauveine, the first aniline dye   | $\text{C}_{27}\text{H}_{24}\text{N}_4$   |
| Perkin's violet            | Mauveine, the first aniline dye   | $\text{C}_{27}\text{H}_{24}\text{N}_4$   |
| Permanent white            | Barium sulfate  | $\text{BaSO}_4$  |
| Peroxide                   | Hydrogen peroxide solution  | $\text{H}_2\text{O}_2 + \text{H}_2\text{O}$                                    |
| Phenol red                 | Phenolsulfonphthalein, an acid-base indicator   | $\text{C}_{19}\text{H}_{14}\text{O}_5\text{S}$                                 |
| Phosgene                   | Carbonyl chloride   | $\text{COCl}_2$  |
| Phosphine                  |   | $\text{PH}_3$  |

|                        |   |   |
|------------------------|---|---|
| Phosphuretted hydrogen | Phosphine   | $\text{PH}_3$   |
| Plaster of Paris       | Calcium sulfate   | $(\text{CaSO}_4)_2 \cdot \text{H}_2\text{O}$                                  |
| Plessy's green         | Chromium phosphate  | $\text{CrPO}_4$   |
| Plimmer's salt         | Sodium antimony tartrate  | $\text{Na}(\text{SbO})\text{C}_4\text{H}_4\text{O}_6$                         |
| Plumbago               | A lead ore, including lead oxide (litharge) or lead sulfide (galena); or graphite   |   |
| Plumbic ochre          | Brown lead oxide  | $\text{PbO}_2$  |
| Plumbum                | Lead  | $\text{Pb}$   |
| Plumbum album          | Lead carbonate  | $2\text{PbCO}_3 \cdot \text{Pb}(\text{OH})_2$                                 |
| Plumbum candidum       | Lead carbonate  | $2\text{PbCO}_3 \cdot \text{Pb}(\text{OH})_2$                                 |
| Pompholix              | Crude zinc oxide  | $\text{ZnO}$  |
| Potash                 | Potassium carbonate   | $\text{K}_2\text{CO}_3$   |
| Potassa                | Potassium hydroxide   | $\text{KOH}$  |
| Precipitated chalk     | Calcium carbonate   | $\text{CaCO}_3$   |
| Prussian blue          | Complex salts used in inks and dyes resulting from the oxidation of the white precipitate of a solution of iron(II) sulfate, $\text{FeSO}_4$ , and potassium ferrocyanide, $\text{K}_4\text{Fe}(\text{CN})_6$ | $\text{Fe}_7(\text{CN})_{18}(\text{H}_2\text{O})_x$ where $14 \leq x \leq 16$ |
| Prussic acid           | Hydrocyanic acid  | $\text{HCN}$  |
| Purple crystals        | Potassium permanganate  | $\text{KMnO}_4$   |
| Pyridoxin              | Vitamin B <sub>6</sub>  | $\text{C}_8\text{H}_{11}\text{NO}_3$  |
| Pyrite                 | Originally any "fire-stone" from which sparks could be struck; eventually an iron sulfide or iron-copper sulfide  |   |
| Pyro                   | Pyrogalllic acid  | $\text{C}_6\text{H}_3(\text{OH})_3$   |
| Pyroacetic spirit      | Acetone   | $(\text{CH}_3)_2\text{CO}$  |
| Pyroligneous acid      | Distillate from wood, containing acetic acid, methanol, and acetone   |   |
| Pyroligneous spirit    | Methanol  | $\text{CH}_3\text{OH}$  |
| Pyroxylic spirit       | Methanol  | $\text{CH}_3\text{OH}$  |
| Quicklime              | Calcium oxide   | $\text{CaO}$  |
| Quicksilver            | Mercury   | $\text{Hg}$   |
| Racemic acid           | An optically inactive form of tartaric acid consisting of equal quantities of optical isomers   |   |
| Radium A               | $^{218}\text{Po}$ , $\lambda = 3$ minutes   |   |
| Radium C               | $^{214}\text{Bi}$ , $\lambda = 20$ minutes; $^{214}\text{Po}$ (C'); $^{210}\text{Tl}$ , $\lambda = 1.3$ minutes   |   |
| Radium D               | $^{210}\text{Pb}$ , $\lambda = 21$ years  |   |
| Radium E               | $^{210}\text{Bi}$   |   |
| Radium F               | $^{210}\text{Po}$ , $\lambda = 140$ days  |   |

|                         |  |  |
|-------------------------|--|--|
| Radium G                | $^{206}\text{Pb}$                            |  |
| Realgar                 | Arsenic sulfide                              | $\text{As}_2\text{S}_2$  |
| Red arsenic             | Arsenic sulfide                              | $\text{As}_2\text{S}_2$  |
| Red lead                | Red lead oxide                               | $\text{Pb}_3\text{O}_4$  |
| Red liquor              | Aluminum acetate solution                    | $(\text{CH}_3\text{CO}_2)_2\text{AlOH}$  |
| Red ochre               | Hematite                                     | $\text{Fe}_2\text{O}_3$  |
| Red orpiment            | Arsenic sulfide                              | $\text{As}_2\text{S}_2$  |
| Red oxide of copper     | Cuprous oxide                                | $\text{Cu}_2\text{O}$  |
| Red oxide of mercury    | Mercuric oxide                               | $\text{HgO}$   |
| Red prussiate           | Potassium ferricyanide                       | $\text{K}_3\text{Fe}(\text{CN})_6$   |
| Red prussiate of potash | Potassium ferricyanide                       | $\text{KC}_3\text{Fe}(\text{CN})_6$  |
| Red prussiate of soda   | Sodium ferrocyanide                          | $\text{Na}_4\text{Fe}(\text{CN})_6$  |
| Red vitriol             | Cobalt sulfate                               | $\text{CoSO}_4 \cdot 7\text{H}_2\text{O}$                                      |
| Regulus                 | Antimony                                     | $\text{Sb}$  |
| Reinecke's acid         | Tetrathiocyanodiammonochromic acid           | $\text{HCr}(\text{NH}_3)_2(\text{SCN})_4$                                      |
| Reinecke's salt         | An ammonium salt of Reinecke's acid          | $\text{NH}_4[\text{Cr}(\text{NH}_3)_2(\text{SCN})_4] \cdot \text{H}_2\text{O}$ |
| Retinol                 | A fat-soluble vitamin derived from carotenes | $\text{C}_{20}\text{H}_{30}\text{O}$   |
| Riboflavin              | Vitamin $\text{B}_2$                         | $\text{C}_{17}\text{H}_{20}\text{N}_4\text{O}_6$                               |
| Rochelle salt           | Potassium sodium tartrate                    | $\text{KNaC}_4\text{H}_4\text{O}_6 \cdot 4\text{H}_2\text{O}$                  |
| Rock salt               | Sodium chloride                              | $\text{NaCl}$  |
| Roman vitriol           | Copper sulfate                               | $\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$                                      |
| Rose vitriol            | Cobalt sulfate                               | $\text{CoSO}_4 \cdot 7\text{H}_2\text{O}$                                      |
| Rouge                   | Ferric oxide                                 | $\text{Fe}_2\text{O}_3$  |
| Rouge, jeweler's        | Ferric oxide                                 | $\text{Fe}_2\text{O}_3$  |
| Rough nitre             | Magnesium chloride                           | $\text{MgCl}_2$  |
| Rubbing alcohol         | Isopropyl alcohol                            | $\text{CH}_3\text{CHOHCH}_3$   |
| Ruby                    | Red corundum                                 | $\text{Al}_2\text{O}_3$  |
| Ruby arsenic            | Arsenic sulfide                              | $\text{As}_2\text{S}_2$  |
| Ruby blende             | Red sphalerite (zinc sulfide)                | $\text{ZnS}$   |
| Ruby copper             | Cuprite, copper oxide                        | $\text{Cu}_2\text{O}$  |
| Ruby silver             | Proustite                                    | $\text{Ag}_3\text{AsS}_3$  |
| Ruby sulfur             | Arsenic sulfide                              | $\text{As}_2\text{S}_2$  |
| Saccharum saturni       | Sugar of lead; lead acetate                  |  |
| Sal acetosella          | Potassium hydrogen oxalate                   | $\text{KHC}_2\text{O}_4$   |

|                    |   |   |
|--------------------|---|---|
| Sal aeratus        | Potassium hydrogen carbonate  | $\text{KHCO}_3$                                     |
| Sal albus          | Borax   |   |
| Sal alembroth      | Insoluble white powder  | $\text{HgNH}_2\text{Cl}$                            |
| Sal ammoniac       | Ammonium chloride   | $\text{NH}_4\text{Cl}$                              |
| Sal armoniack      | Ammonium chloride   | $\text{NH}_4\text{Cl}$                              |
| Sal commune        | Sodium chloride   | $\text{NaCl}$                                       |
| Sal de duobus      | Potassium sulfate   | $\text{K}_2\text{SO}_4$                             |
| Sal enixum         | Glauber's salt  |   |
| Sal fossile        | Sodium chloride   | $\text{NaCl}$                                       |
| Sal marinum        | Sodium chloride   | $\text{NaCl}$                                       |
| Sal nitri          | Nitre   |   |
| Sal nitrum         | Nitre   |   |
| Sal sapientiae     | Mercury ammonium chloride   | $\text{HgNH}_2\text{Cl}$                            |
| Sal soda           | Crystalline sodium carbonate  | $\text{NaHCO}_3$                                    |
| Sal spaientiae     | Insoluble white powder  | $\text{HgNH}_2\text{Cl}$                            |
| Sal volatile       | Ammonium carbonate  | $(\text{NH}_4)_2\text{CO}_3$                        |
| Saleratus          | Potassium hydrogen carbonate or sodium bicarbonate  | $\text{KHCO}_3$ or $\text{NaHCO}_3$                 |
| Salt               | Sodium chloride   | $\text{NaCl}$                                       |
| Salt cake          | Impure sodium sulfate   | $\text{Na}_2\text{SO}_4$                            |
| Salt of hartshorn  | Ammonium carbonate  | $(\text{NH}_4)_2\text{CO}_3$                        |
| Salt of lemon      | Potassium hydrogen oxalate  | $\text{KHC}_2\text{O}_4$                            |
| Salt of tartar     | Solid potassium carbonate   | $\text{K}_2\text{CO}_3$                             |
| Salt of vitriol    | Zinc sulfate  | $\text{ZnSO}_4 \cdot 7\text{H}_2\text{O}$           |
| Salt of wormwood   | Potassium carbonate   | $\text{K}_2\text{CO}_3$                             |
| Saltpeter          | Potassium nitrate   | $\text{KNO}_3$                                      |
| Saltpeter (Chile)  | Impure sodium nitrate   | $\text{NaNO}_3$                                     |
| Salts of hartshorn | Ammonium carbonate  | $(\text{NH}_4)_2\text{CO}_3$                        |
| Salts of lemon     | Potassium binoxalate  | $\text{KHC}_2\text{O}_4 \cdot \text{H}_2\text{O}$   |
| Salts of sorrol    | Potassium acid oxalate  | $\text{KHC}_2\text{O}_4 \cdot \text{H}_2\text{O}$   |
| Salts of tartar    | Potassium carbonate   | $\text{K}_2\text{CO}_3$                             |
| Scheele's green    | Acidic copper arsenite  | $\text{CuHAsO}_3$                                   |
| Schlippe's salt    | Sodium sulfantimonate   | $\text{Na}_3\text{SbS}_4 \cdot 9\text{H}_2\text{O}$ |
| Schöllkopf's acid  | One of 1-naphthol-4,8-disulfonic acid, 1-naphthylamine-4,8-disulfonic acid, and 1-naphthylamine-8-sulfonic acid |   |
| Seignette's salt   | Rochelle salt   |   |
| Silica             | Silicon dioxide   | $\text{SiO}_2$                                      |

|                         |   |  |
|-------------------------|---|--|
| Siliceous earth         | Silicon dioxide   | $\text{SiO}_2$   |
| Silver glance           | Argentite, silver sulfide   | $\text{Ag}_2\text{S}$  |
| Slaked lime             | Calcium hydroxide   | $\text{Ca}(\text{OH})_2$   |
| Soapstone               | Impure magnesium silicate   | $\text{H}_2\text{Mg}_3(\text{SiO}_3)_4$  |
| Soda                    | Sodium carbonate  | $\text{Na}_2\text{CO}_3$   |
| Soda ash                | Dry sodium carbonate  | $\text{Na}_2\text{CO}_3$   |
| Soluble glass           | Hydrated sodium silicate  | $\text{Na}_2\text{Si}_4\text{O}_9 \cdot x\text{H}_2\text{O}$                                 |
| Sorrel salt             | Potassium hydrogen oxalate  | $\text{KHC}_2\text{O}_4$   |
| Spanish green           | Copper acetate (verdigris)  |  |
| Spanish white           | Bismuth oxychloride, $\text{BiOCl}$ , or oxynitrate, $\text{BiONO}_3$     |  |
| Spencer's acid          | 3 g silver nitrate + 3 g nitric acid + 3 g mercurous nitrate + 100 cc     | $\text{HgNO}_3 \cdot \text{H}_2\text{O} + \text{AgNO}_3 + \text{HNO}_3 + \text{H}_2\text{O}$ |
| Spirit of alum          | Sulfuric acid   | $\text{H}_2\text{SO}_4$  |
| Spirit of colonial      | Methanol  | $\text{CH}_3\text{OH}$   |
| Spirit of Columbian     | Methanol  | $\text{CH}_3\text{OH}$   |
| Spirit of hartshorn     | Ammonia gas in alcohol (Given in Gunsmith Kinks II as ammonium hydroxide) | ...  |
| Spirit of nitre         | Nitric acid or ethyl nitrite  | $\text{HNO}_3$ or $\text{C}_2\text{H}_5\text{NO}_2$  |
| Spirit of nitrous ether | Ethyl nitrate   | $\text{C}_2\text{H}_5\text{NO}_2$  |
| Spirit of salt          | Hydrochloric acid   | $\text{HCl}$   |
| Spirit of vitriol       | Sulfuric acid   | $\text{H}_2\text{SO}_4$  |
| Spirit of wine          | Concentrated aqueous ethanol  | $\text{C}_2\text{H}_5\text{OH} + \text{H}_2\text{O}$   |
| Spirit of wood          | Methanol  | $\text{CH}_3\text{OH}$   |
| Spirits of salt         | Hydrochloric acid   | $\text{HCl}$   |
| Spirits of wine         | Ethyl alcohol   | $\text{C}_2\text{H}_5\text{OH}$  |
| Spiritus saltus         | Hydrochloric acid   | $\text{HCl}$   |
| Spiritus vini           | Concentrated aqueous ethanol  | $\text{C}_2\text{H}_5\text{OH} + \text{H}_2\text{O}$   |
| Stannum glaciale        | Bismuth (literally glacial tin)   | $\text{Bi}$  |
| Sugar of lead           | Lead acetate  | $\text{Pb}(\text{C}_2\text{H}_3\text{O}_2)_2 \cdot 3\text{H}_2\text{O}$                      |
| Sulfur per campanum     | Sulfuric acid   | $\text{H}_2\text{SO}_4$  |
| Sulfuric ether          | Diethyl ether   |  |
| Sulfuric ether          | Ethyl ether   | $(\text{C}_2\text{H}_5)_2\text{O}$   |
| Sulphovinic acid        | Ethyl hydrogen sulfate  | $\text{C}_2\text{H}_5 \cdot \text{HSO}_4$  |
| Sulphuret               | Sulfide   |  |
| Sulphuretted            | Combined or impregnated with sulfur                                       |  |
| Sulphuretted hydrogen   | Hydrogen sulfide  | $\text{H}_2\text{S}$   |
| Sulphurous acid         | Sulfur dioxide  | $\text{SO}_2$  |

|                                |   |   |
|--------------------------------|---|---|
| Sulphurous gas                 | Sulfur dioxide  | $\text{SO}_2$   |
| Sweet salt                     | Sodium chlorite   | $\text{NaClO}_2$  |
| Sweet spirit of nitre          | Ethyl nitrite   | $\text{C}_2\text{H}_5\text{NO}_2$   |
| Sweet spirits of nitre         | Ethyl nitrite solution with ethyl alcohol   | $\text{C}_2\text{H}_5\text{NO}_2 + \text{C}_2\text{H}_5\text{OH}$         |
| Sylvius's febrifuge salt       | Potassium chloride  | KCl   |
| Talc                           | Magnesium silicate  | $\text{H}_2\text{Mg}_3(\text{SiO}_3)_4$                                   |
| Tartar                         | Potassium hydrogen tartrate   | $\text{KHC}_4\text{H}_4\text{O}_6$  |
| Tartar emetic                  | Potassium antimonyl tartrate  | $\text{KSbOC}_4\text{H}_4\text{O}_6 \cdot 1/2\text{H}_2\text{O}$          |
| Tartar of wine                 | Potassium hydrogen tartrate   | $\text{KHC}_4\text{H}_4\text{O}_6$  |
| Tectum argenti                 | Bismuth   | Bi  |
| Telluric ochre                 | Yellow tellurium oxide  | $\text{TeO}_2$  |
| Terra ponderosa                | Barium oxide  | BaO   |
| Terra ponderosa<br>aerata      | Barium carbonate  | $\text{BaCO}_3$   |
| Tetrachloromethane             | Carbon tetrachloride  | $\text{CCl}_4$  |
| Thénard's blue                 | Blue cobalt aluminate   | $\text{Co}(\text{AlO}_2)_2$   |
| Thiamin                        | Also thiamine, vitamin B <sub>1</sub>   | $\text{C}_{12}\text{H}_{17}\text{N}_4\text{OSCl}$                         |
| Thorium A                      | $^{216}\text{Po}$ , $\lambda = 150 \text{ ms}$  |   |
| Thorium C                      | $^{212}\text{Bi}$ , $\lambda = 61 \text{ minutes}$ ; C' is $^{212}\text{Po}$ , $\lambda = 300 \text{ ns}$ . |   |
| Thorium D                      | $^{208}\text{Tl}$ , $\lambda = 3 \text{ minutes}$   |   |
| Thorium X                      | $^{224}\text{Ra}$ , $\lambda = 3.6 \text{ days}$  |   |
| Thymol blue                    | Thymolsulphonphthalein, an acid-base indicator  | $\text{C}_{27}\text{H}_{30}\text{O}_5\text{S}$                            |
| Tin salt                       | Stannous chloride   | $\text{SnCl}_2$   |
| Tincture of ferric<br>chloride | Ferric chloride + ethyl alcohol   | $\text{FeCl}_3 \cdot 6\text{H}_2\text{O} + \text{C}_2\text{H}_5\text{OH}$ |
| Tincture of steel              | Ferric chloride + ethyl alcohol   | $\text{FeCl}_3 \cdot 6\text{H}_2\text{O} + \text{C}_2\text{H}_5\text{OH}$ |
| TNT                            | Trinitrotoluene   | $\text{C}_6\text{H}_2\text{CH}_3(\text{NO}_3)_3$                          |
| Toluol                         | Toluene   | $\text{C}_6\text{H}_5\text{CH}_3$   |
| Toluylene red                  | Dimethyldiaminotoluphenazine hydrochloride, an<br>acid-base indicator                                       |   |
| Trona                          | Natural sodium carbonate/bicarbonate  | $\text{Na}_2\text{CO}_3 \cdot \text{NaHCO}_3 \cdot 2\text{H}_2\text{O}$   |
| Trypan blue                    | Blue dye  | $\text{C}_{17}\text{H}_{12}\text{N}_3\text{O}_7\text{S}_2\text{Na}_2$     |
| Tungstic ochre                 | Yellow tungsten oxide   | $\text{WO}_3$   |
| Turbith mineral                | Basic sulfate of mercury  | $\text{HgSO}_4 \cdot 2\text{HgO}$   |
| Turnbull's blue                | Ferroferricyanide   | $\text{Fe}_3[\text{Fe}(\text{CN})_6]_2$                                   |
| Turpeth                        | Basic sulfate of mercury  | $\text{HgSO}_4 \cdot 2\text{HgO}$   |



|                         |  |                               |
|-------------------------|--|-------------------------------|
| Tyrian purple           | 6,6'-dibromoindigotin, a dye of the ancient Mediterranean  | $C_{16}H_8N_2O_2Br_2$         |
| Uranic ochre            | Uraconite, a yellow uranium oxide  | $U_2O_3$                      |
| Uranium I               | $^{238}U$  |                               |
| Uranium II              | $^{234}U$ , $\lambda = 2.5 \cdot 10^5$ years   |                               |
| Uranium X               | $X_1 = ^{234}Th$ , = 24 days, $X_2 = ^{234}Pa$   |                               |
| Uranium yellow          | Sodium uranate, a pigment used in glass and ceramics   | $Na_2UO_4$                    |
| Uranivitriol            | A uranium sulfate  |                               |
| Urinous air             | Ammonia  |                               |
| Urinous salt            | An ammonium salt; occasionally any alkaline salt.  |                               |
| Vegetable alkali        | Crude or purified potassium carbonate  | $K_2CO_3$                     |
| Verdigris               | Copper acetate   | $Cu(C_2H_3O_2)_2 \cdot H_2O$  |
| Vermillion              | Mercury sulfide, a red pigment   | $HgS$                         |
| Victoria green          | Triphenylmethane dye, acid-base indicator  | $C_{23}H_{25}N_2Cl$           |
| Vinegar                 | Dilute and impure acetic acid  | $CH_3COOH$                    |
| Vitamin A               | A fat-soluble vitamin derived from carotenes   | $C_{20}H_{30}O$               |
| Vitamin B               | A group of water-soluble, heat labile compounds that typically serve as co-enzymes. They include many examples that contain amine groups (as in "vital amine").  |                               |
| Vitamin B <sub>1</sub>  | Thiamin  | $C_{12}H_{17}N_4OSCl$         |
| Vitamin B <sub>12</sub> | Cyanocobalamin   | $C_{63}H_{90}CoN_{14}O_{14}P$ |
| Vitamin B <sub>2</sub>  | Riboflavin   | $C_{17}H_{20}N_4O_6$          |
| Vitamin B <sub>3</sub>  | Niacin   | $C_6H_5NO_2$                  |
| Vitamin B <sub>6</sub>  | Pyridoxin  | $C_8H_{11}NO_3$               |
| Vitamin B <sub>c</sub>  | Folic acid   | $C_{19}H_{19}N_7O_6$          |
| Vitamin C               | Ascorbic acid  | $C_6H_8O_6$                   |
| Vitamin D               | This fat-soluble vitamin consists of steroid derivatives including ergocalciferol, $C_{28}H_{44}O$ , and cholecalciferol, $C_{27}H_{44}O$  |                               |
| Vitamin E               | This vitamin occurs in four naturally occurring forms, called $\alpha$ -, $\beta$ -, $\gamma$ -, and $\delta$ -tocopherol. The $\alpha$ form, $C_{29}H_{50}O_2$ , has the greatest activity; the $\beta$ - and $\gamma$ -forms have one fewer methyl group, and the $\delta$ - form two fewer. |                               |
| Vitriol                 | A sulfate  |                               |
| Vitriol                 | Sulfuric acid  | $H_2SO_4$                     |
| Vitriolate of tartar    | Potassium sulfate  | $K_2SO_4$                     |
| Vitriolic acid          | Sulfuric acid  | $H_2SO_4$                     |
| Volatile alkali         | Aqueous ammonia, $NH_3$  |                               |

|                               |  |  |
|-------------------------------|--|--|
| Washing soda                  | Crystalline sodium carbonate   | $\text{Na}_2\text{CO}_3$                                     |
| Water glass                   | Hydrated sodium silicate   | $\text{Na}_2\text{Si}_4\text{O}_9 \cdot x\text{H}_2\text{O}$ |
| White arsenic                 | Arsenic trioxide   | $\text{As}_2\text{O}_3$                                      |
| White lead                    | Basic lead carbonate   | $(\text{PbCO}_3)_2 \cdot \text{Pb}(\text{OH})_2$             |
| White precipitate             | Insoluble white powder   | $\text{HgNH}_2\text{Cl}$                                     |
| White vitriol                 | Zinc sulfate   | $\text{ZnSO}_4 \cdot 7\text{H}_2\text{O}$                    |
| Whitewash                     | Solution of quick lime or slaked lime used as a cheap ...<br>substitute for paint. |  |
| Whiting                       | Powdered calcium carbonate   | $\text{CaCO}_3$  |
| Wolfram                       | Tungsten   | W  |
| Wood alcohol                  | Methyl alcohol   | $\text{CH}_3\text{OH}$                                       |
| Xylenol blue                  | 1,4-dimethyl-5-hydroxybenzenesulfonphthalein, an<br>acid-base indicator            |  |
| Xylol                         | Xylene   | $\text{C}_6\text{H}_4(\text{CH}_3)_2$                        |
| Yellow arsenic                | Arsenic sulfide  | $\text{As}_2\text{S}_3$                                      |
| Yellow ochre                  | Mixture of powdered iron oxide and clay  |  |
| Yellow precipitate            | Yellow mercury oxide   | $\text{HgO}$   |
| Yellow prussiate              | Potassium ferricyanide   | $\text{K}_3\text{Fe}(\text{CN})_6 \cdot 3\text{H}_2\text{O}$ |
| Yellow prussiate of<br>potash | Potassium ferrocyanide   | $\text{K}_4\text{Fe}(\text{CN})_6 \cdot 3\text{H}_2\text{O}$ |
| Zinc white                    | Zinc oxide   | $\text{ZnO}$   |