

# Common Clay and Glaze Materials

Alumina Hydrate – calcined form of alumina, used in glazes and on kiln shelves

Ball Clay – A plastic secondary clay, high firing and white or whitish in color

Barium Carbonate – a glaze flux. I don't use this in my studio due to it being a toxic material

Bentonite – a clay, often as a plasticizer in clay. Also used in glazes and to prevent settling

Bone Ash (Calcium Phosphate) – a glaze flux, large amounts in glazes can cause pin holing

Clay or Clay Body – a decomposed feldspathic rock from which a pottery is made

Cobalt Carbonate – blue colorant used in glazes, melts with less speckling than cobalt oxide

Cobalt Oxide – blue colorant used in glazes, extremely strong color, can have speckling

Copper Carbonate – green colorant used in glazes, melts evenly into glaze

Copper Oxide – green colorant

Cornwall Stone – clay and glaze ingredient

Feldspar – glaze flux, also used in clays

Fireclays – high temp clays with high percentage of fluxes

Gerstley Borate – used in glazes, gives a slight opalescent color

Ilmenite – creates dark specks in glazes

Iron Oxide (ferric oxide, ferrous oxide) – used in clay, glazes, slips and for brushwork

Kaolin (china clay) – used in clays and glazes, fires to a pure white, I use EPK in my studio

Lead (all forms) – toxic material used in glaze, produces rich, vibrant colors

Magnesium Carbonate – a glaze flux, can be used to make intentional “crawl” effects

Magnesium Sulfate (Epsom salt) – used as a flocculent (thickener) in glaze containing clay

Manganese Oxide – a colorant, used in glazes, produces browns

Nepheline Syenite – sub for potash feldspar, can lower the melting point of a glaze

Nickel Oxide – glaze colorant, available in black or green

Rutile – a tan glaze colorant, impure form of titanium dioxide, promotes crystalline surfaces

Silica (Flint or Quartz) – used in glazes as a glass former and in clays

Sodium Silicate – a deflocculant

Spodumene – a glaze and clay ingredient

Talc – clay and glaze ingredient, used in whiteware bodies

Titanium Oxide or Dioxide – used in glazes, an opacifier, promotes crystal growth

Whiting (calcium carbonate) – used in clay and glazes, a glaze flux

Wollastonite – a clay and glaze ingredient, promotes clear transparent glazes

Zinc Oxide – used in glazes, as a flux, an opacifier, promotes high gloss and vibrancy

Zircopax – an opacifier, a commercially produced glaze ingredient