

Primary Function of Common Ceramic Materials in Claybodies and Glazes

CERAMIC MATERIAL	GLAZE FUNCTION	CLAYBODY FUNCTION
Albany Slip clay	Glaze core	Colorant
Ball clay	Alumina Opacity	Plasticity
Barnard clay	Glaze core Color (ST, P)	Color
Bone ash	Opacifier	Melter (4-6)
Borax	Melter (5-6, E) Glassmaker Carbon Trap (ST, P)	Melter (4-6, E)
Boric Acid	Melter (5-6, E) Glassmaker	Melter (4-6, E)
Boron Frits	Glaze core (5-6, E) Melter Colemanite (s) Gerstley Borate (s)	Melter (4-6, E)
Colemanite	Glaze core (5-6, E) Melter Gerstley Borate (s) Boron Frits (s)	Melter (4-6, E)
Cornwall Stone	Glaze core (ST, P) (Low melter, high SiO ₂)	Melter (P)
Dolomite	Melter (ST) Opacifier Whiting (s)	Melter (ST)
EPK kaolin	Alumina Opacity (ST, P)	Core (P, W)
Flint (silica)	Glassmaker	Glassmaker Glaze-fit
Fluorspar	Melter	
Gerstley Borate	Glaze core (4-6, E) Melter Colemanite (s) Boron Frits (s)	Melter (4-6, E)
Goldart clay		Core (ST)
Kentucky Stone		Core (ST)

key

(s)=substitute option

(E)=earthenware claybody

(ST)=stoneware claybody

(P)=porcelain claybody

(FL)=flameware claybody, c/9-10

(W)=white-burning claybodies, c/4-10

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CERAMIC MATERIAL	GLAZE FUNCTION	CLAYBODY FUNCTION
Lepidolite	Lithium glaze core	Melter (FL)
Magnesium Carbonate	Melter (ST, P, W) Opacifier	Melter
Nepheline Syenite	Glaze core (low SiO ₂) (high Na ₂ O) (high Al ₂ O ₃)	Melter (ST, P)
Ocmulgee Red clay	Color (ST)	Color Melter Core (E 4-6)
Petalite	Lithium glaze core (ST 9-10)	Melter (FL)
Potash Spars Custer G-200 K200	Glaze core (ST, P) G-200, K200 (s) Custer, K200 (s) Custer, G-200 (s)	Melter (ST, P)
Redart	Color	Melter Color Core (E)
Rotten Stone	Glaze core (ST, P)	Melter Color (ST)
Soda Spars Kona F-4 C-6	Glaze core (ST, P) C-6 (s) Kona F-4 (s)	Melter (ST, P)
Spodumene	Lithium glaze core (ST, P)	Melter (FL)
Talc	Melter Opacifier	Melter (E, 4-6, W)
Volcanic ash	Glaze core (ST, P) Cornwall Stone (s)	
Whiting	Melter (ST, P) Opacifier Wollastonite (s) Dolomite (s)	Melter (ST)
Wollastonite	Melter (ST, P) Opacifier Whiting (s) Dolomite (s)	Melter (ST, P)
Wood Ash	Glaze core (ST, P) Melter (ST, P) Colorant	
Zinc	Melter (ST, P) Opacifier (ST, P)	