

REFERENCE NOTES

1. Can be used as a 'body stain' in porcelain at high temperatures. All of the brown colors can be used as 'body stains' but will vary in shade considerably depending on the composition of the body and temperature at which it is fired.
 - Use only as a 'body stain'
 - **Firing Temperatures** can only be a rough guide. Firing at 2200 degrees F on a slow schedule may give the equivalent maturing as firing at 2300 degrees F on a fast schedule. The cycle, atmosphere and rate of cooling will affect the color.
2. Max. firing limit 2156 degrees F (1180 degrees C).
3. Max. firing limit 2300 degrees F (1260 degrees C).
4. Max firing limit 1976 degrees F (1080 degrees C).
 - **Zinc Oxide** influences the color in a glaze more than any other element. Generally, zincless glazes should not contain magnesium oxide. Some colors containing zinc are to be used in a zincless glaze. The zinc in the color is in a combined form and will not harm the color, but free zinc oxide in the glaze can destroy the color.
5. Do not use zinc in glaze.
6. May be used with zinc or without zinc.
7. Zinc not necessary, but gives better results.
8. Best results with no zinc.
 - **Calcium Oxide** content as calcium carbonate should be between 12-15% for best color development. Adding the molecular equivalent of calcium oxide with wollastonite, a natural calcium silicate, often gives better uniformity. The increased silica from the wollastonite must be subtracted or the glaze will have a poor surface.
9. Glaze must contain 6.7 to 8.4% CaO (12-15% CaCO₃)

COMPOSITION CHART KEY

Al - Aluminum Oxide

B - Boric Oxide

Ca - Calcium Oxide

Cd - Cadmium

Co - Cobalt Oxide

Cr - Chromium Oxide

Fe - Iron Oxide

Mn - Manganese Dioxide

Ni - Nickel Oxide

Pr - Praseodymium Oxide

Se - Selenium

Sb - Antimony Oxide

Si - Silicon Dioxide

Sn - Tin Dioxide

Ti - Titanium Dioxide

V - Vanadium Pentoxide

Zn - Zinc Oxide

Zr - Zirconium Dioxide

LEAD IS NOT USED IN THE MANUFACTURING OF OUR PRODUCTS.

	Old No.		Al	B	Ca	Cd	Co	Cr	Fe	Mg	Mn	Ni	Pr	Si	Sn	Ti	V	Zn	Zr	Zx	Se	See Ref.
PINKS AND CRIMSONS																						
6000	203	Shell Pink			X			X						X	X							3,5,9
6001	193	Alpine Rose			X			X						X	X							3,5,9
6003	160	Crimson			X			X						X	X							3,5,9
6006	183	Deep Crimson			X			X						X	X							3,5,9
6032	5232	Coral							X					X					X			3
REDS & ORANGES																						
6030		Mango				X								X					X		X	1,3,6
6021	0	Dark Red				X								X					X		X	1,3,6
6025	0	Coral Red				X								X					X		X	1,3,6
6026	0	Lobster				X								X					X		X	1,3,6
6027	0	Tangerine				X								X					X		X	1,3,6
6028	0	Orange				X								X					X		X	1,3,6
6088	5988	Dark Red				X								X					X		X	1,3,6
6097	5997	Dark Red				X								X					X		X	1,3,6
BROWNS																						
6160	160	Dark Chocolate	X					X	X		X							X				3,6,7
6190	0	Deep Brown						X	X		X											3,6,7
6100	1357	Woodland	X					X	X					X				X				3,6,7
6101	201	Chestnut						X	X		X							X				3,6,7
6103	303	Golden	X					X	X									X				3,6,7

	Old No.		Al	B	Ca	Cd	Co	Cr	Fe	Mg	Mn	Ni	Pr	Si	Sn	Ti	V	Zn	Zr	Zx	Se	See Ref.
GREENS (CONTINUED)																						
6213		Hemlock																				
6219	19	French			X		X	X						X				X				1,3,5,8
6223	223	Ivy	X					X						X								3,5
BROWNS																						
6236	1386	Chartreuse												X		X	X		X			1,3,6
6242	1399	Bermuda											X	X			X		X			3,6
6254	64	Dk. Teal Grn.	X				X	X						X				X				1,3,6,8
6263	5363	Victoria Green			X			X						X					X			3,5,9
6204	B204	Victoria Green			X			X						X					X			3,5,9
6264	5364	Victoria Green			X			X						X					X			3,5,9
6255	65	Jade Green	X				X	X						X				X				1,3,6,8
6266	668	Peacock					X	X														1,3,6,8
6268	868	Sea Green					X	X						X				X				1,3,6,8
6274	4174	Nickel Silicate										X		X								1,3
6280		Avacado	X				X	X	X					X		X	X	X	X			3,6
BLUES																						
6360	1060	Willow	X				X	X						X	X							3,5
6363	3137	Sky Blue	X				X							X								1,3,6
6320	2820	Delft	X				X							X	X			X				1,3,6
6364	3364	Turquoise												X			X		X			1,3,6
6368	5068	Copen Blue	X				X							X				X				1,3,6

	Old No.		Al	B	Ca	Cd	Co	Cr	Fe	Mg	Mn	Ni	Pr	Si	Sn	Ti	V	Zn	Zr	Zx	Se	See Ref.
BODY STAINS (CONTINUED)																						
6319		Mn Al Co Lavender																				
6434		Fe Zn Yellow																				
6485		Cr Sb Ti Yellow																				

Note: The recommendations made herein are based on our research and the research of others, and are believed to be accurate. No guarantee of their accuracy is made. The products discussed are sold without warranty, expressed or implied, and upon such condition, purchasers shall make their own tests to determine the suitability of such products for their particular purposes. Likewise, statements concerning the possible use of these products are not intended as recommendations to use these products in infringement of any patent. For safety and handling questions, please refer to the Safety Data Sheet which was supplied with your purchase.