

 MA6650	 MA6600	 MA6612	 MA6500	 MA6700
 MA6109	 MA6126	 MA6129	 MA6001	 MA6003
 MA6006	 MA6020	 MA6097	 MA6025	 MA6088
 MA6026	 MA6028	 MA6030	 MA6027	 MA6450
 MA6479	 MA6485	 MA6404	 MA6464	 MA6280
 MA6242	 MA6201	 MA6236	 MA6209	 MA6219
 MA6266	 MA6204	 MA6383	 MA6308	 MA6300
 MA6313	 MA6376	 MA6339	 MA6363	 MA6305
 MA6371	 MA6306	<b>Key to Composition</b> Al ..... Aluminum Oxide ..... $Al_2O_3$ B ..... Boric Acid ..... $B_2O_3$ Ca ..... Calcium Carbonate ..... $CaO$ Co ..... Cobalt Oxide ..... $CoO$ Cr ..... Chromium Oxide ..... $Cr_2O_3$ Fe ..... Iron Oxide ..... $Fe_2O_3$ Mn ..... Manganese Dioxide ..... $MnO_2$ Ni ..... Nickel Oxide ..... $NiO$ Pr ..... Praseodymium Oxide ..... $Pr_6O_{11}$ Sb ..... Antimony Oxide ..... $Sb_2O_3$ Si ..... Silicon Dioxide ..... $SiO_2$ Sn ..... Tin Dioxide ..... $SnO_2$ Ti ..... Titanium Dioxide ..... $TiO_2$ V ..... Vanadium ..... $V_2O_5$ Zn ..... Zinc Oxide ..... $ZnO$ Zr ..... Zirconium Dioxide ..... $ZrO_2$		
 MA6381	 MA6319			
 MA6385	 MA6304			

### Using Mason Stains

- To stain clay, or for brushwork over or under glaze:  
For  $\Delta 10$ : mix 1:1 stain to Custer Feldspar or Unispar.  
For  $\Delta 4-6$ : mix 1:1 stain to Nepheline Syenite.  
For  $\Delta 06$ : mix 1:1 stain to Ferro Frit 3124 or Frit 3110.
- When making your own glazes, liquid glaze should reach consistency of whole milk. Add Mason Stains by weight as a percentage of dry ingredients. Use .5% to 3% for Green, Black & Blue, or 2% to 8% for Yellow, Pink and Purple.
- When mixing your own clay, add Mason Stains by weight as a percentage of dry ingredients: 2% to 5% for Green, Blue or Black, or 5% to 10% for Yellow, Pink, Purple.
- Engobes and underglazes should reach consistency of cream. Add Mason Stains by weight as a percentage of dry ingredients: 3% to 10% for Green, Blue & Black, or 8% to 15% for Yellow, Pink and Purple.
- When coloring moist clay, allow for 30% water, then add Mason Stains by weight as a percentage of the estimated dry ingredients (ie, 17½lbs dry out of 25lbs total weight).

### Reference Notes

- Can be used as porcelain body stain at  $\Delta 6$  or  $\Delta 10$ .
- Max firing limit 2156° F (1180° C).
- Max firing limit 2390° F (1310° C).
- Max firing limit 1976° F (1080° C).
- DO NOT USE ZINC in glaze.
- Stain may be used with or without zinc.
- Zinc not necessary, but gives better results.
- Best results with NO zinc.
- Glaze must contain 6.7% - 8.4% calcium oxide.

\* **Zinc-free glazes** should generally not contain magnesium oxide. Some stain colors containing zinc should be used in glazes without additional zinc. The free zinc oxide can change the glaze's fired color.

\* **Calcium oxide** content (in calcium carbonate) should be 12-15% for best color. Adding the molecular equivalent of calcium oxide with Wollastonite often gives better uniformity, but you should factor in Wollastonite's higher silica content.