

Technical Information



726 Series Four-Color Printing Low Metal Release Onglaze Ceramic Colors for the Decoration of Porcelain, Bone China, Vitreous China and Earthenware

Product Codes and Color Shades

Print Sequence	Color Shade	Product Code	Pantone® Code ¹
1st	Yellow	137261	Yellow C
2nd	Cyan	127261	Cyan C
3rd	Magenta	77263	205C
4th	Black	147261	Black C
5th	Flux (can be omitted)	107211	

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¹ The above mentioned Pantone® code is only a guideline for the color shade.

Heavy metal release

All colors of the 726 Series fulfill the heavy metal release limits of QB/T2455-2011 under proper testing conditions.

The release of heavy metals is primarily influenced by the glaze composition, the firing conditions and the color deposit.

Heavy metal release might be increased if layers are too thin, if the firing temperature is too high or if the firing cycle at peak temperature is too long.

It is recommended that metal release testing to be conducted according to the relevant standard procedures for all products manufactured under this technical production conditions.

Application

726 Series are special applied for four-color process, but can also be used for other applications such as normal direct and indirect screen printing, spraying, lining and banding etc.

Screen printing

We recommend polyester screen: 120-150 mesh/ cm (300-380mesh/inch) with thixotropic medium. The ratio of color to medium may vary with different manufacturers.

Typically Color powder: Medium = 10:6-10:7

Spraying

Color suspensions for spraying can be made with water-soluble or oil-based medium.

Machine Lining and Banding

Color suspensions applied via brushes, steel- or neoprene-rollers are generally based on water-soluble medium.

Miscibility

The four-printing colors are intermixable to meet complicated ceramic color designs. Flux 107211 is perfectly for increasing gloss or diluting color intense when required.

Firing

The best firing temperature is related to glaze and firing cycle etc. We recommend firing temperature 780- 830°C with 60-90min and soaking time 10 min. Color shade affected by firing temperature, glaze composition and kiln atmosphere etc. The kiln should be fitted with better ventilation facilities and make sure oxidize atmosphere.

Color Deposit

The maximum color deposit after firing, depending on the glaze and the firing temperature etc. Too thick color deposit may cause blistering. We recommend the customer to do the trials prior to production

Chemical Resistance

The chemical resistance of the fired color layers is influenced by the color deposit, the firing conditions and the glaze etc.

The colors do not show a visible attack with 4% acetic acid solution ($22\pm 2^{\circ}\text{C}$, 24h) as well as with 5% sodium carbonate solution ($60\pm 2^{\circ}\text{C}$, 32h).

Storage

The colors should be stored in a dry place. Opened containers should be closed carefully. To ensure that the colors have not absorbed any humidity, we recommend drying the color powder at approx. 130°C prior to pasting.

Limitation of Warranty and Liability

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