

Technical data sheet

16 1232 - decorating color

Solutions for Decoration

Color shade: brown

Further description: resistant onglaze color

Color range: 105 (Sunshine)

Use for: ceramic, porcelain, bone china, tiles

Application:

Storage: Powder colors should be stored in a dry place. We recommend to dry the color at 130 °C prior to mixing with an oil-based screen printing medium. Moisture in the color powder may result in an emulsion in the paste which makes it difficult to process.

Environment: Waste material treatment, environmental health and safety protection has to follow the local regulations and legislation.

Color description:

Lab	276
Pantone	1685 C
NCS	5050 - Y 90 R
RAL	8012
Surface	glossy

For description of the color the nearest color index was chosen.

Firing conditions:

Normal firing, glass [°C]:			
Normal firing, porcelain [°C]:	750 - 820	normal firing, bone china [°C]:	- -
Fast firing, porcelain [°C]:	- -	fast firing, bone china [°C]:	- -

Chemical characteristics:

Glaze frit system	Pb-Na-Si-Li-B
PbO [weight-%]	30-60
CdO [weight-%]	- -
Stain system	Zn-Cr-Fe

The values for the oxides are given in ranges. If there is no value written, the oxide is not added to the recipe. However, small amounts may be present as an impurity.

Resistance:

Acid resistance 3% HCl solution (23°C/5h)*	0
Alkali resistance 0,5% Calgonite-solution (77°/16h)*	3
Pb release mg/dm ² (EN 1388.1 and EN 1388.2)	0,19
Cd release mg/dm ² (EN 1388.1 and EN 1388.2)	0,01

*The resistance depends on the glaze and firing conditions.

Physical characteristics:

Lin. coeff. of thermal expansion/10 ⁻⁷ [K]	- -
Transformation temperature [°C]	- -
Softening temperature [°C]	- -
Softening intervall [°C]	- -
Half ball temperature [°C]	- -

Particle size distribution:

Fineness D50 [µm]	3,0
Fineness D 90 [µm]	10,0

The above mentioned values are the values of the standard product. The production batches can vary slightly from the standard product.

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0 = no visible attack

1 = slightly attack causing appearance of iridescence or visible stain on the exposed surface

2 = beginning removal of color layer causing significant color change and blurring of reflected images

3 = significant removal of color surface causing a matte or dull surface

4 = complete removal of color surface

n.d. = not determined n.a. = not applicable