

# Technical data sheet

17 1874 - decorating color

Solutions for Decoration

Color shade:	dark red
Further description:	resistant onglaze color, Cd red
Color range:	12 (Palette 70)
Use for:	ceramic, porcelain, bone china, tiles
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	--
Pantone	1805 C
NCS	--
RAL	3000
Surface	glossy

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

## Firing conditions:

Normal firing, glass [°C]:			
Normal firing, porcelain [°C]	800 - 850	normal firing, bone china [°C]:	770 - 820
Fast firing, porcelain [°C]	850 - 920	fast firing, bone china [°C]:	--

## Chemical characteristics:

Glaze frit system	Pb-Si-B
PbO / weight-%	8
CdO / weight-%	17
Stain system	CdSSe

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)*	1
Alkali resistance 0,5% Calgonite-solution (77°/16h)*	2
Pb release mg/dm <sup>2</sup> (EN 1388.1 and EN 1388.2)	0,08
Cd release mg/dm <sup>2</sup> (EN 1388.1 and EN 1388.2)	0,110

\*The resistance depends on the glaze and firing conditions.

**Physical characteristics:**

Lin. coeff. of thermal expansion/10 <sup>-7</sup> /K	75
Transformation temperature / °C	--
Softening temperature/ °C	--
Softening intervall / °C	--
Half ball temperature/ °C	--

**Particle size distribution:**

Fineness D50 / μm	4,0
Fineness D 90 / μm	11,0

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

\*

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

**Limitation of Warranty and Liability**

Vibrantz believes that the information contained in this document is accurate at the time of its publication. Vibrantz makes no warranty with respect to the information contained in this document. The information in this document is not a product specification, either in whole or in part. Your use of the information contained in this document and your purchase and use of this Vibrantz product are at your sole discretion. Downstream users are responsible for determination of the suitability of this product and for testing in specific applications. Nothing in this document shall be construed as a license for use that infringes upon any property rights of any third party. Please refer to the Safety Data Sheet (SDS) for safe use, handling and disposal information. All sales by Vibrantz to you are subject to Vibrantz's Terms and Conditions of Sale, as amended from time to time and available at [www.vibrantz.com](http://www.vibrantz.com). In the event this document conflicts with Vibrantz's Terms and Conditions of Sale, Vibrantz's Terms and Conditions of Sale shall control.