

TECHNICAL DATA SHEET

Onglaze Colour D series

1. General Information

The colour series D are lead-containing onglaze colours for the decoration of porcelain, bone china, vitreous china and earthenware. We supply onglaze colours in the D series both powder and liquid form.

2. Firing Range

Type of substrate	Firing Range
Bone china, Earthenware and Vitreous China	750-800°C normal firing 900-920°C fast firing(18-23 minutes)
Porcelain	780-820 °C
Tile	820-850 °C

3. Heavy Metal Content

Colour of the D series contains lead. With the exception yellow, orange and reds are cadmium contain.

D 1500 Scarlet
D 1511 Red
D 1511(s) Red
D 1522 Orange
D 1600 Canary

4. Miscibility

Cadmium free and cadmium-containing colour should not be mix together. Otherwise, there are no limitations to mixing.

5. Heavy Metal Release

All tests were conducted according to EN 1388-1-2

- Pb-emission max 0.8 mg/dm²
- Cd-emission max 0.07 mg/dm²

Heavy metal release is primarily influenced by glaze composition, firing cycle, kiln atmosphere and thickness of deposit. Therefore, this information can only be an approximation. It can not replace customers own tests.

6. Application

D series colour have been developed and tested for normally applications, hand painting, screen printing (direct and indirect), spraying, lining and banding.

- Hand Painting: All colours of the series D can be pasted with oil or water based media.
- Screen Printing: The colour intensity of a printed area is influenced through many factors: Of course mostly by colour thickness and the used screen! But also the thickness of a deposit, the stencil, the squeegee pressure- and angle and printing speed influence the intensity of the decoration. This multitude of factors makes screen recommendation particular difficult. For standard screens, 77-120 T(195-300 mesh) polyester screen have proved suitable. Cadmium colour we recommend 73-90T(185-230 mesh) polyester screen. Purple colour we recommend 120-140T(300-355 mesh) polyester screen.
- Spraying: Colours for spraying can be pasted with oil and water based media.
- Lining and Banding: Colour suspensions that are applied via brushes, steel or neoprene-rollers are generally based on water-soluble media.

7. Dishwasher Resistance

The resistance of fired D colours to acidic foods and dishwasher conditions is influenced by the colour deposit, firing conditions and glaze, These tests according to EN 12875.

If the decoration withstands 500 washing cycles essentially without damage, we designate is as dishwasher durable. If it withstands 1000 washing cycles, we designate is as dishwasher resistance.

8. Resistant Onglaze Colour Of Series D

<u>No.</u>	<u>Colour</u>	<u>No.</u>	<u>Colour</u>
D 1101	Black สีดำ	D 1500	Scarlet สีแดงเข้ม
D 1112	White สีขาว	D 1511	Red สีแดงสด
D 1168	White สีขาว	D 1511(S)	Red สีแดง
D 1124	Grey สีเทา	D 1522	Orange สีส้ม
D 1214	Deep Blue สีน้าเงินเข้ม	D 1530	Pink สีชมพู
D 1220	Blue สีน้าเงิน	D 1538	Pink สีชมพู
D 1222	Blue สีน้าเงิน	D 1540	Rose สีกุหลาบ
D 1237	Blue สีน้าเงิน	D 1543	Rose สีกุหลาบ
D 1241	Peacock Blue สีเขียวน้าเงิน	D 1550	Orchid สีกัลวยไม้
D 1252	Sky Blue สีฟ้าน้าเงิน	D 1556	Violet สีม่วง
D 1263	Turquoise สีเขียวฟ้า	D 1570	Purple Rose สีบานเย็น
D 1301	Iron Peach สีหมากสุก	D 1571	Ruby Pink สีชมพูทับทิม
D 1311	Tan สีน้าตาล	D 1572	Violet Rose สีม่วงกุหลาบ
D 1322	Honey สีน้าผึ้ง	D 1600	Canary Yellow สีเหลืองขมิ้น
D 1323	Iron Red สีน้าตาลเหล็ก	D 1611	Lemon Yellow สีเหลืองมะนาว
D 1400	Dark Green สีเขียวแก่	D 1620	Dark Yellow สีเหลืองแก่
D 1411	Chrome Green สีเขียวโครม	D 1901	Relief Agent ตัวผสมนูน
D 1422	Lemon Green สีเขียวมะนาว	D 1902	Relief Agent ตัวผสมนูน
D 1434	Grass Green สีเขียวใบหญ้า	D 1951	Transparent Base ตัวผสมใส
D 1444	Green สีเขียว		
D 1447	Peacock Green สีเขียวนกยูง		
D 1453	Yellow Green สีเขียวไพล		