BOC TRADING CO., LIMITED • WWW.BOCCOLORS.COM

Performance Inorganic Pigments & Ceramic Color Solutions

高性能复合无机颜料、陶瓷色料与氧化铁颜料产品手册

> Delivering high-purity, thermally stable, and batch-consistent inorganic color solutions for global ceramic, industrial coating, engineering plastic, and architectural material manufacturers.
>
> 专注为全球陶瓷、工业涂料、工程塑料及建筑建材行业提供高耐温、高耐候、批次稳定的无机色彩解决方案。

Cd-Se Inclusion 包裹红/桔系列	Pr-Zr & Ti-Ni 镨黄 / 镍钛黄	V-Zr & Co-Al 钒蓝 / 钴蓝系列	Cr-Co Spinel 铬绿 / 钴绿系列	Ti-Sb-Cr & Fe-Cr 钛铬棕 / 铁铬棕	Iron Oxides 合成氧化铁系列

01 / CONTINUOUS

稳定供应链保障

Integrated manufacturing bases and international export platform ensuring uninterrupted global supply and fast container dispatch.

02 / STABLE

极端工况耐受性

Engineered for high-temperature firing up to 1300°C and superior resistance to UV weathering, acids, alkalis, and solvents.

03 / CONSISTENT

严苛批次一致性

Malvern 3000 particle size control and strict colorimetric QC (ΔE*ab) guaranteeing zero shade drift across production lots.

BOC TRADING CO., LIMITED

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GLOBAL EXPORT EDITION

Europe • Americas • South & SE Asia
Middle East • Africa

01 / CORPORATE PROFILE & GLOBAL CAPABILITIES

Company Overview & Quality Assurance 公司简介与质量体系

100+	1300°C	Grade 8 / 5	RoHS
Standard Color Grades 成熟色料与颜料牌号	Max Ceramic Firing Temp 陶瓷色料最高烧成耐温	Light & Weather Fastness 最高级耐光与耐候评级	Environmental Compliance 符合国际环保与重金属标准

About BOC Trading Co., Limited

BOC Trading Co., Limited is a specialized international supplier and exporter of high-performance inorganic pigments, ceramic stains, and synthetic iron oxides.

Backed by modern manufacturing facilities, advanced R&D laboratories, and strict ISO-aligned quality management systems, we deliver reliable coloring solutions across **Europe, North & Latin America, South Asia, Southeast Asia, the Middle East, and Africa**.

Our international commercial desk streamlines global settlement (T/T, L/C, D/P), multi-port consolidation, and tailored sample matching for industrial buyers.

关于 BOC Trading Co., Limited

BOC TRADING CO., LIMITED 专注于高性能复合无机颜料（CICP）、陶瓷全系列色料及高品质合成氧化铁颜料的全球供应链整合与国际出口业务。

依托现代化生产基地与精密检测中心，我们的产品涵盖**陶瓷包裹色料、釉用色料、坯用色料、胶辊印花色料、复合无机颜料及氧化铁颜料**六大核心板块，远销欧洲、南北美洲、印度、东南亚、中东及非洲市场。

公司配备马尔文3000激光粒度仪及全套耐候、色差检测设备，确保每一批次产品具备优异的分散性、着色力与批次稳定性。

Core Application Industries 核心应用领域

1. Architectural & Sanitary Ceramics 建筑与日用陶瓷

Porcelain tiles, glazed wall/floor tiles, sanitary ware, tableware, and digital/rotor ceramic printing inks requiring high firing stability (1180°C–1300°C).

2. Industrial & Architectural Coatings 工业与建筑涂料

Coil coatings, PVDF fluorocarbon coatings, powder coatings, high-heat silicone coatings, anti-corrosive primers, and IR-reflective cool roof coatings.

3. Plastics & Masterbatches 塑料与工程塑料色母粒

Polyolefins (PE, PP), PVC profiles, engineering plastics (ABS, PC, PA) for automotive parts, fibers, and thin films requiring zero warping and high heat resistance (>500°C).

4. Construction & Glass Printing Inks 建材与高温玻璃油墨

Colored concrete, cement mortar, paving blocks, roofing granules, sintered colored sands, and automotive/architectural glass enamels.

02 / CERAMIC PIGMENTS PORTFOLIO

Ceramic Stains & Inclusion Pigments 陶瓷色料全系列

A. Cd-Se Inclusion Pigments 锆基包裹色料系列 (Firing Temp: 1300°C)

Zircon-encapsulated cadmium sulfoselenide crystals providing vibrant, high-temperature-resistant red, orange, and yellow shades for ceramic glazes.

Item No. 编号	Product Name (EN)	品名 (CN)	Composition 成分	Max Temp	Shade 色标
ZL-218	Dark Red Inclusion	包裹深红	Cd / Se / Zr / Si	1300°C	
ZL-218A	Dark Red Inclusion	包裹深红	Cd / Se / Zr / Si	1300°C	
ZL-217	Red Inclusion	包裹红	Cd / Se / Zr / Si	1300°C	
ZL-218B	Red Inclusion	包裹红	Cd / Se / Zr / Si	1300°C	
ZL-216	Red Inclusion	包裹红	Cd / Se / Zr / Si	1300°C	
ZL-228	Orange Inclusion	包裹桔黄	Cd / Se / Zr / Si	1300°C	
ZL-238A	Orange Inclusion	包裹桔黄	Cd / Se / Zr / Si	1300°C	
ZL-238B	Orange Inclusion	包裹桔黄	Cd / Se / Zr / Si	1300°C	
ZL-286	Orange Inclusion	包裹桔黄	Cd / Se / Zr / Si	1300°C	
ZL-258	Yellow Inclusion	包裹金黄	Cd / Zr / Si	1300°C	

B. Ceramic Glaze Pigments 陶瓷釉用色料系列

Item No.	Product Name (EN)	品名 (CN)	Chemical System 化学成分	Firing Temp	Shade 色标
ZL-500	Pr Yellow	镨黄	Pr / Zr / Si / Ce	1250°C	
ZL-501	Pr Yellow	镨黄	Pr / Zr / Si	1250°C	
ZL-527	V Yellow	锆钒黄	V / Zr	1280°C	
ZL-531	Orange	桔黄	Ti / Cr / Sb	1280°C	
ZL-532	Orange Red	金红	Ti / Cr / Fe / Zn	1280°C	
ZL-507	Coral Pink	锆铁红	Fe / Zr / Si	1280°C	
ZL-505	Maroon	玛瑙红	Sn / Cr / Ca / Si	1250°C	
ZL-506	Pink	桃红	Sn / Cr / Ca / Si	1250°C	
ZL-535	Mn Red	锰红	Mn / Al	1280°C	
ZL-521	Violet	丁香紫	Cr / Sn	1300°C	

Item No.	Product Name (EN)	品名 (CN)	Chemical System 化学成分	Firing Temp	Shade 色标
ZL-502	Turquoise Blue	钒蓝	V / Zr / Si	1280°C	
ZL-503	Sea Blue	海碧蓝	Co / Al / Zn	1300°C	
ZL-504A	Cobalt Blue	钴蓝	Co / Al	1300°C	
ZL-504B	Cobalt Blue	宝蓝	Co / Si	1300°C	
ZL-513	Peacock Blue	孔雀蓝	Co / Cr / Al	1250°C	
ZL-516	Peacock Green	孔雀绿	Co / Cr / Al	1250°C	
ZL-523	Red Brown	红棕	Cr / Fe / Zn	1280°C	
ZL-524	Golden Brown	金棕	Cr / Fe / Zn	1280°C	
ZL-525	Dark Brown	深棕	Cr / Fe / Zn	1280°C	
ZL-537	Gray	锑锡灰	Sn / Sb	1280°C	
ZL-508	Black	黑色	Fe / Cr / Mn	1280°C	
ZL-509 / 510	Bright / Co Black	钴黑	Fe / Cr / Mn / Co	1180°C	
ZL-511	Co Black (High Temp)	高温钴黑	Fe / Cr / Mn / Co	1280°C	

C. Ceramic Body Pigments & Rotor Colors 坯用色料与胶辊印花色料

Series 系列	Item No.	Product Name (EN)	品名 (CN)	Chemical System	Firing Temp
Body 坯用	**ZL-301**	V-Zr Blue	钒锆蓝	Zr / Si / V	1300°C
Body 坯用	**ZL-302**	Sea Blue	海碧蓝	Al / Zn / Co	1300°C
Body 坯用	**ZL-305 / 306**	Cobalt Blue	钴蓝 / 宝兰	Al / Co & Si / Co	1300°C
Body 坯用	**ZL-311**	Cr Green	铬绿	Al / Cr	1250°C
Body 坯用	**ZL-315**	Pr Yellow	镨黄	Zr / Si / Pr	1250°C
Body 坯用	**ZL-316 / 317**	Orange Yellow / Red	桔黄 / 桔红	Cr / Ti / Sb	1250–1300°C
Body 坯用	**ZL-321 / 322**	Mn Pink	锰红	Al / Mn	1250°C
Body 坯用	**ZL-325 / 326**	Desert / Sand Red	沙漠红 / 金砂红	Cr/Al/Y & Fe/Al	1200°C
Body 坯用	**ZL-327**	Ferrosilicon Red	硅铁红	Si / Fe	1300°C
Body 坯用	**ZL-330**	Coffee Brown	咖啡棕	Cr / Fe / Ti	1200°C
Body 坯用	**ZL-335 / 336**	Body Black	坯用黑	Cr / Fe / Mn	1250°C

Series 系列	Item No.	Product Name (EN)	品名 (CN)	Chemical System	Firing Temp
Body 坯用	**ZL-340**	Body Grey	坯用灰	Cr / Fe / Mn / Ni	1300°C
Rotor 胶辊	**ZL-401 / 402**	Pr Yellow / Turquoise	镨黄 / 钒蓝	Pr/Zr/Si & V/Zr/Si	1250°C
Rotor 胶辊	**ZL-405 / 406**	Cobalt Blue	钴蓝 / 宝兰	Co/Al & Co/Si	1300°C
Rotor 胶辊	**ZL-410**	Rotor Black	特黑	Fe / Cr / Mn / Ni	1300°C
Rotor 胶辊	**ZL-412 / 413**	Tea Yellow / Golden Brown	黄茶 / 金棕	Cr / Fe / Zn / Al	1280–1300°C
Rotor 胶辊	**ZL-415 / 420**	Dark Brown / V Yellow	深棕 / 钒锆黄	Cr/Fe/Zn & V/Zr	1250–1300°C

> **Technical Note 技术提示：** Printed color swatches are visual references only; actual fired tones depend on base glaze composition, kiln atmosphere, and firing curve. Always conduct laboratory trials before mass production. 印刷色标仅供参考，实际发色受基础釉配方、窑炉气氛及烧成曲线影响，大货前请先试样确认。

03 / COMPLEX INORGANIC COLOR PIGMENTS (CICP)

High-Performance CICP Series 复合无机颜料技术参数表

Calcined mixed-metal oxide pigments engineered for extreme heat stability (>500°C, CF-33), zero migration, non-warping behavior in polyolefins, and maximum exterior durability (Light Fastness: 8; Weather/Acid/Alkali Fastness: 5; RoHS compliant).

Grade 牌号	Chemical Name & Color Index	Chemistry	D50 (μm)	Oil Abs. (g/100g)	Spec. Grav.	pH	Heat (°C)
Yellow 2200K–2230K	Chrome Antimony Titanium Buff (P.Br.24) 钛铬棕	Ti-Sb-Cr	0.7–0.8	~28	4.4	6–9	>500
Yellow 2111K–2113K	Nickel Antimony Titanium Yellow (P.Y.53) 镍钛黄	Ni-Sb-Ti	0.7–0.8	~16–18	4.5	6–9	>500
Yellow 2730K–2735K	Zinc Ferrite Yellow (P.Y. 119) 铁酸锌黄	Zn-Fe	1.2	~30	5.0	4–8	300
Blue 2501K–2503K	Cobalt Aluminate Blue (P.B.28) 钴蓝	Co-Al	1.1	~30–32	4.2	7–10	>500
Blue 2511K–2513K	Cobalt Chromite Blue (P.B.36) 钴铬蓝	Co-Cr-Al	1.1–1.2	~28	4.6–4.7	6–9	>500
Green 2601K–2604K	Cobalt Titanate Green (P.G.50) 钴钛绿	Co-Ti-Ni-Zn	1.0	~18	5.0	7–10	>500
Green 2621K–2623K	Cobalt Chromite Green (P.G.26) 钴铬绿	Co-Cr-Zn-Al	1.2–1.5	~15–18	5.1	5–9	>500

Grade 牌号	Chemical Name & Color Index	Chemistry	D50 (μm)	Oil Abs. (g/100g)	Spec. Grav.	pH	Heat (°C)
Green GN / DG	Chrome Oxide Green (P.G.17) 氧化铬绿	Cr_2O_3	0.9–1.0	~20–21	5.1	4–8	>500
Black 3030 / 3050	Manganese Ferrite Black (P.Bk.26) 锰铁黑	Mn-Fe	0.9	~30	5.0	4–8	>500
Black 2300K–2315K	Copper Chromite Black (P.Bk.28) 铜铬黑	Cu-Cr(-Mn)	0.5–0.6	~26–28	5.3–5.4	4–8	>500
Black 2720K / 2721K	Manganese Ferrite Black (P.Bk.33) 锰铁黑	Mn-Fe	0.8	~30	5.0	4–8	>500
Brown 2701K / 2714K / 2715K	Iron Chrome Brown / IR Black (P.Br.29) 铁铬棕/红外黑	Fe-Cr	0.6–0.7	~26	5.1–5.2	5–8	>500
Brown 2740K–2742K	Zinc Iron Chrome Brown (P.Br.33) 锌铁铬棕	Zn-Fe-Cr	0.6–0.7	~20–22	4.9–5.0	5–8	>500
Brown 2901K–2903K	Manganese Antimony Titanium (P.Y.164) 钛锰棕	Mn-Sb-Ti	0.8–0.9	~20–21	4.8	4–8	>500
Red 6140 / 6180 / 2811K	High-Temp Iron Oxide Red (P.R.101) 耐高温铁红	Fe_2O_3 / Fe-Si	0.6–0.8	~21–22	4.8–4.9	3–7	>500
Violet 2901K	Cobalt Violet (P.V.47) 钴紫	$CoLiPO_4$	1.5	~25	4.2	5–9	>500

Near-Infrared (NIR) Reflective Cool Roof Pigments 近红外反射隔热颜料

Specialized dark-tone pigments reflecting near-infrared solar radiation (700–2500 nm) to reduce surface heat buildup on architectural roofs, facades, and automotive exteriors (Tested at ~80 μm dry film over white substrate):

Grade 牌号	Color Index & Composition	Lightness (L*)	NISR* (近红外反射率)	TSR* (总太阳反射率)
Brown 2701K	Pigment Brown 29 (Fe-Cr)	30.0	**58.0%**	28.0%
Black 2714K	Pigment Brown 29 (Fe-Cr)	28.5	**58.5%**	28.0%
Black 2715K	Pigment Brown 29 (Fe-Cr)	28.0	**58.5%**	28.5%

04 / SYNTHETIC IRON OXIDE PIGMENTS

Industrial & Construction Iron Oxides 合成氧化铁颜料系列

High-tinting-strength synthetic iron oxides featuring excellent dispersion, zero warping/shrinkage, Light Fastness Grade 8, and Weather/Acid/Alkali/Solvent Fastness Grade 5.

Color Series	Available Grades 牌号	Color Index / Formula	Heat Stability	Masstone / Tint	Primary Applications
Iron Oxide Red 氧化铁红	**110, 120, 130, Y101, 190**	Pigment Red 101 α-Fe_2O_3	800°C (5 min)		Industrial coatings, plastics, concrete & pavers
Iron Oxide Yellow 氧化铁黄	**G313, 920**	Pigment Yellow 42 α-FeOOH	180°C (5 min)		Industrial coatings, plastics & construction materials
Iron Oxide Black 氧化铁黑	**722, 318, 330**	Pigment Black 11 Fe_3O_4	180°C (5 min)		Anticorrosive coatings, asphalt & cement blocks
Iron Oxide Brown 氧化铁棕	**663, 686**	Composite Iron Oxide Fe_2O_3/FeOOH/Fe_3O_4	180°C (5 min)		Wood coatings, anticorrosive primers & masonry
Iron Oxide Orange 氧化铁橙	**960**	Composite Iron Oxide α-Fe_2O_3 + α-FeOOH	Standard		Industrial coatings & architectural finishes
Iron Oxide Green & Blue 复合铁绿 / 铁蓝	**Green 5605, 838; Blue 810**	Compound Oxide FeOOH + Phthalo	Standard		Flooring coatings, concrete tiles & construction

Global Sales, Sample Requests & Technical Support

Contact our commercial desk for custom shade matching, Technical Data Sheets (TDS), Safety Data Sheets (SDS), and laboratory evaluation samples.

BOC TRADING CO., LIMITED

Official Websites: www.boccolors.com • www.bocpgmt.com

Sales & Inquiries: sales@boccolors.com • info@boccolors.com

Packaging: 25 kg multi-wall kraft paper / PE valve bags on fumigated pallets (20–24 MT / 20' FCL)

Trade Terms: FOB / CIF / CFR • T/T, Irrevocable L/C, D/P