

Technical Competence ...



MAKING IS THE DIFFERENCE

Union Colours is a wholly owned international division of the Longyu Pigment and Chemicals Corporation, the largest Organic Pigment manufacturer in China. First established in 1980, our parent group has grown to be a major force in the production of Organic pigments.

The main production site in China is situated at an industrial park in Changzhou, Jiangsu. Here we manufacture the bulk colour lines to internationally required standards that are used in Printing Inks, Coatings and Plastics. With continuous investment in new plant and technology the plant is modern, efficient and exceeds all local, regional and national environmental requirements. Our pigment dispersions plant is also in China, where we manufacture our range of Unicol brand aqueous pigment dispersions.

Whilst having substantial production capacity, the factory is supported by satellite units which produce the lesser volume high performance colour lines.

Our technical activities are global, steered from our purpose built Technical Centre in the United Kingdom, we have development and testing capabilities on three continents. This allows us to bring together our customers, development, manufacturing and quality control, resulting in a robust, sustainable supply chain and product improvement programme.

Since the foundation of the company in 2003 we have been engaged in a technically led campaign to improve the performance of our products. The continued success of this development programme is resulting in us increasingly being considered as one of the market leaders.

'Strength through Experience'



KEY TO QUICK REFERENCE GUIDE:

		Recommended	0	Potential	Use
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				DECO	RATIVE	INDU	STRIAL	AUTO
UC Brand Name C.I Name	UC Code	Туре	Description	Aqueous	Solvent	Solvent	Powder	Re-Finish
Sincol Yellow Yellow 3	1104-002	Arylide	Very green shade, used in aqueous and aliphatic solvent based decorative paints.	•	0			
Sincol Yellow Yellow 65	1134-001	Arylide	Red shade yellow, recommended for decorative, general industrial, architectural and road marking paints.	•	•	•		
Sincol Yellow Yellow 74	1136-D25	Arylide	Mid-shade, recommended for aqueous pigment concentrates. Exhibits high strength with low viscosity and excellent stability.	•				
Sincol Yellow Yellow 74	1136-D70	Arylide	Mid-shade, opaque. For aqueous and solvent based decorative paints, and selected industrial applications.	•	•	0		
Sincol Yellow Yellow 74	1136-G85	Arylide	Mid-shade, opaque. For aqueous and solvent based decorative paints, and selected industrial applications.	•	•	0	0	
Sinfast Yellow Yellow 83	1160-003	*Diarylide	Red shade, for general industrial finishes, and 'lead free' road marking paints.	•	•	•		
Sinfast Yellow Yellow 83	1160-D91	*Diarylide	Red shade, opaque. Very good light-fastness. Recommended as a middle chrome replacement for 'lead free' industrial finishes.		0	•	0	0
Sinfast Yellow Yellow 110	1110-002	Isoindolinone	Red shade, excellent fastness properties. Useful in combination with other high performance organic and inorganic yellows for industrial & architectural coatings.	•	•	•	•	•
Sinfast Yellow Yellow 138	1148-001	Quinophthalone	Green shade with excellent light and weather fastness in full/deep shades. Often used as a base colour in industrial mixing schemes.	0	•	•	0	0
Sinfast Yellow Yellow 139	1129-002	Isoindoline	Red shade, opaque. Very good fastness properties. Recommended as a middle chrome replacement in solvent based industrial finishes.			•	0	•
Sinfast Yellow Yellow 151	1122-001	Benzimidazolone	Green shade, suitable as lemon chrome replacement in solvent based industrial finishes.		0	•	0	•
Sinfast Yellow Yellow 154	1123-001	Benzimidazolone	Mid shade, excellent fastness to light and weathering. Recommended for high grade industrial and architectural coatings.	•	•	•	0	•



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				Recommended Potential Us									
				DECO	RATIVE	INDUS	TRIAL	AUT0					
UC Brand Name C.I Name	UC Code	Туре	Description	Aqueous	Solvent	Solvent	Powder	Re-Finish					
Sinfast Yellow Yellow 155	1135-001	Bisacetoacetarylide	Mid shade, high strength. Very good fastness to light and weathering in full shades. Recommended for industrial finishes.	•	•	•	0	0					
Sinfast Orange Orange 36	1158-001	Benzimidazolone	Opaque, excellent light and weather fastness. Used as molybdate orange replacement for the production of 'lead free' industrial coatings.		•	•	0	•					
Sincol Scarlet Red 3	3138-D12	β Naphthol	Yellow shade, used in interior aqueous systems and aliphatic full shade decorative paints.	•	•								
Sinfast Red Red 5	3107-D21	Naphthol AS	Blue shade, used in general industrial finishes and antifouling coatings.	0		•							
Sincol Red Red 48:4	3126-001	BONA, Mn	Mid shade, used in combination with molybdate orange for economical industrial reds.			•							
Sincol Red Red 48:4	3126-002	BONA, Mn	Very blue shade, used in combination with molybdate orange for economical industrial reds/maroons.			•							
Sinfast Red Red 112	3150-001	Naphthol AS	Mid shade, recommended for interior aqueous decorative systems	•									
Sinfast Red Red 112	3150-002	Naphthol AS	Mid shade, recommended for interior aliphatic solvent based decorative and industrial coatings.		•	0							
Sindo Red Red 122	3122-001	Quinacridone	Blue shade, excellent fastness properties. Used in most decorative and industrial coatings as self shade and as a shading component of other organic reds.	•	•	•	0	•					
Sindcon Red Red 166	3266-001	Disazo Condensation	Yellowish shade, with very good light and weather fastness. Recommended for high grade industrial finishes, auto refinish and architectural coatings.	•	•	•		•					
Sinfast Red Red 170	3128-001	Naphthol AS	Blueish shade, good fastness properties, used in many economical industrial reds where high durability is not a requirement.		0	•	0						
Sinfast Red Red 170	3128-003	Naphthol AS	Mid shade, opaque, very good light-fastness. Recommended for bright red 'lead free' industrial finishes.		0	•	0	0					



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Recommended P	otential	Us
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				DECO	RATIVE	INDUS	STRIAL	AUTO
UC Brand Name C.I Name	UC Code	Туре	Description	Aqueous	Solvent	Solvent	Powder	Re-Finish
Sincar Violet Violet 23	6260-003	Dioxazin	Red shade, suitable for all aqueous decorative coatings.	•				
Sincar Violet Violet 23	6260-004	Dioxazin	Red shade, used in all decorative and industrial coatings as self shade or as a shading component of reds and blues and tinter of whites.	0	•	•	0	•
Sincar Violet Violet 23	6260-006	Dioxazin	Very red shade, suitable for all aqueous decorative coatings.	•				
Sinco Blue Blue 15:1	4372-002	Cu Phthalo, α	Red shade, excellent all round fastness properties. Recommended for solvent based industrial finishes.	0	0	•	0	•
Sinco Blue Blue 15:2	4388-002	Cu Phthalo, α	Red shade, very good flocculation resistance. Used mainly in Industrial finishes.		0	•		
Sinco Blue Blue 15:3	4382-003	Cu Phthalo, β	Green shade, excellent all round fastness propertises, used in many solvent based systems.		•	•		
Sinco Blue Blue 15:3	4382-006	Cu Phthalo, β	Green shade, excellent all round fastness properties. Used in many aqueous decorative systems.	•	0			
Sinco Blue Blue 15:3	4382-331	Cu Phthalo, β	Clean, green shade, excellent all round fastness proporties. Recommended for aqueous decorative systems.	e •				
Sinco Green Green 7	5436-371	Cu Phthalo	Excellent all round fastness properties, suitable for many aqueous & solvent based decorative and industrial coatings.	•	•	•		



Fastness Data					LIGHT WEATHER FASTNESS FASTNESS				PIGM	FASTN IENT PO		NTS AND REAGENTS CURED PANEL				
C.I. Pigment	UC Product Name	UC Code		Full Shade	Tint (1:10)	Full Shade	Tint (1:10)	Butanol	Butyl Acetate	Mek	Xylene	White Spirit	Aaid (HCI)	Alkali (NaOH)	Overspray (NC)	Heat °C
Yellow 3	Sincol Yellow	1104-002	Α	7	6	4-5	3-4	2	2	2	2	2-3	5	4-5	3-4	130
Yellow 65	Sincol Yellow	1134-001	Α	7-8	6	4-5	3	3	2-3	2	2-3	3	5	5	3	140
Yellow 74	Sincol Yellow	1136-D25	Α	6	5	4	2-3	3-4	3	2-3	3	4	5	4-5	3-4	140
Yellow 74	Sincol Yellow	1136-D70	А	7-8	6-7	4-5	3	4	3	2-3	2-3	4	5	4-5	4	140
Yellow 74	Sincol Yellow	1136-G85	Α	7-8	6-7	4-5	3	4	3	2-3	2-3	4	5	4-5	4	140
*Yellow 83	Sinfast Yellow	1160-003	AM	6-7d	5-6	3-4d	3	4-5	4	3-4	3-4	5	5	5	5	200
*Yellow 83	Sinfast Yellow	1160-D91	AM	7-8d	6-7	4-5d	3-4	5	4-5	4-5	4	5	5	5	5	200
Yellow 110	Sinfast Yellow	1110-002	AM	8	7	5	4-5	5	4-5	4-5	4-5	5	5	5	5	200
Yellow 138	Sinfast Yellow	1148-001	AM	8	7-8	5	4-5	5	4-5	4	4	5	5	5	5	200
Yellow 139	Sinfast Yellow	1129-002	AM	8	7-8	5	4-5	5	5	5	5	5	5	4	5	200
Yellow 151	Sinfast Yellow	1122-001	AM	8	7-8	5	4	5	5	4-5	4-5	5	5	3	5	200
Yellow 154	Sinfast Yellow	1123-001	AM	8	7-8	5	4-5	4	4-5	4	5	5	5	5	5	160
Yellow 155	Sinfast Yellow	1135-001	AM	7-8	6-7	4-5	3	4-5	4	3-4	4	5	5	5	5	200
Orange 36	Sinfast Orange	1158-001	AM	8	7-8	5	4	4-5	4-5	4	5	5	4	5	5	160
Red 3	Sincol Scarlet	3138-D12	Α	7	3-4	4	1	2-3	2	1-2	2	2	4-5	4-5	2	140
Red 5	Sinfast Carmine	3107-D21	AM	7d	6	3-4d	2-3	4	3-4	2-3	4	5	4-5	4	4-2	140
Red 48:4	Sincol Red	3126-001	AM	7	6	4d	2	2	3-4	3-4	3-4	4	3	2-3	4	160
Red 48:4	Sincol Red	3126-002	AM	7	6	4d	2	2	4	3-4	4	4	3	2-3	4-5	160
Red 112	Sinfast Red	3150-001	А	7-8	6	4-5	2-3	3	2-3	3	2	4	4-5	4-5	3	180
Red 112	Sinfast Red	3150-002	Α	7-8	6	4-5	2-3	3	2-3	3	2	4	4-5	4-5	3	180
Red 122	Sindo Red	3122-001	AM	7-8	7-8	4-5	4-5	4-5	4-5	4-5	5	5	5	5	5	200
Red 166	Sindcon Red	3266-001	AM	8	7	5	4	3-4	3-4	3-4	3-4	4-5	5	5	5	200
Red 170	Sinfast Red	3128-001	AM	6d	4-5	3d	2	3-4	3-4	3-4	4-5	5	4-5	4-5	4-5	160
Red 170	Sinfast Red	3128-003	AM	7d	5	4d	2-3	3-4	3-4	3-4	3-4	4-5	4-5	4-5	5	160



Fastness Data					LIGHT WEATHER FASTNESS FASTNESS				PIGN	FASTN MENT PC		NTS AND REAGENTS CURED PANEL				
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Violet 23	Sincar Violet	6260-003	AM	7-8	7	4-5	3-4	4	4	3	4-5	5	5	5	4-5	160
Violet 23	Sincar Violet	6260-004	AM	7-8	7	4-5	3-4	4	4-5	3	4-5	5	5	5	4-5	160
Violet 23	Sincar Violet	6260-006	AM	7-8	7	4-5	3-4	4	4	3	4-5	5	5	5	4-5	160
Blue 15:2	Sinco Blue	4388-001	AM	8	7-8	5	4-5	5	5	4-5	4-5	5	5	5	5	200
Blue 15:3	Sinco Blue	4382-003	AM	8	7-8	5	4-5	5	5	4-5	4-5	5	4-5	4-5	5	200
Blue 15:3	Sinco Blue	4382-006	AM	8	7-8	5	4-5	5	5	5	5	5	4-5	4-5	5	200
Blue 15:3	Sinco Blue	4382-331	AM	8	7-8	5	4-5	5	5	5	5	5	4-5	4-5	5	200
Green 7	Sinco Green	5436-371	AM	8	7-8	5	4-5	5	5	4.5	5	5	4-5	4	5	200

Light fastness Rated against a simultaneously exposed ISO Blue Wool Scale 1-8, where 8 denotes the highest fastness.

Weather fastness 1,000 hrs exposure in a Q-Sun Xenon test chamber XE-1-S Test program ISO 4892-2 Rated using 1-5 grey scale ISO 105 A02 5 – No colour change 1 – Severe change d – Darkens

Solvent fastness A folded, sealed filter paper containing 0.5g of pigment is immersed in 20ml of the solvent for 24hrs.

Colour change assessed on 1-5 grey scale ISO 105 A02. 5 – High fastness, no bleed 1 – Very poor fastness, severe bleed

Heat stability (30mins) Temperature above which significant change in colour will result. Quoted temperature is a guide only, as heat stability is very dependent on binder system used.

Chemical resistance Cured alkyd-melamine film exposed for 24 hrs to 5% HCl & 5% NaOH. Assessed using ISO 105 A02 grey scale **5** – No Colour change **1** – Severe change

Overspray fastness A paint panel, stoved at 130*C for 30mins, is oversprayed with a Nitro-cellulose based white. Colour change of the white overspray is assessed on 1-5 Grey scale, ISO 105 A02

A – Long oil air drying alkyd – Vilkyd 211LA70 AM – Short oil stoving alkyd/melamine – Vilkyd 787/Uramex MF 863 B1

- Product technical data sheets are available on request.
- *Diarylide pigments may decompose >200*C, see ETAD Notice No.2 'Thermal decomposition of diarylide pigments'
- The information in this brochure is based on our current knowledge, information and experience. Responsibility or liability cannot be assumed for factors lying outside our knowledge and or control. Customers should varify a products suitability in their own tests under local conditions.
- Due to the limitations of the four colour printing process, the colour panels in this brochure may not match the actual shade of the specific pigment. They are for illustrative purposes only.

UK Headquarters and Technical Centre



UK Development Laboratory





China – Offices & Laboratories



China — Pigment Production line

India – Technical Centre



South Africa – Laboratories





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