














































































 Pigment Name C.I. Pigment No. C.I. No.	Fastness to Solvents and Reagents								Printing Inks								Paints and Coatings								Plastic								 Full Shade Tint Shade			
	Ethanol	Xylene	Ethyl Acetate	M.E.K.	Mineral Spirit	Water	Acid	Alkali	Light Fastness	Transparency	Offset	Tin Printing	Applications				Fastness				Applications				Fastness				Application							
													Polyamide/NC	Chlorinated PP	Urethane	Flexo		Heat	Weather	Oven Spray	Hiding Power	Automobile	Industrial	Coil Coating	Decorative	Heat	Light	Migration	PVC	Low Density P.E.	High Density P.E./P.P.	Polystyrene/ABS			Thermosetting	Textile
																Alcohol	Water																			
Pigment Yellow 1 C.I. No. 11680	3	3	3	3	4	5	5	5	8	2	✱	✱	●	●	●	●	✱	160	5	3	4	●	●	●	✱	160	-	-	●	●	●	●	●	✱		
Pigment Yellow 3 C. I. No. 11710	3	3	3	3	4	5	5	5	6	3	✱	✱	●	●	●	✱	✱	150	4	3	4	●	✱	●	✱	150	-	-	●	●	●	●	●	✱		
Pigment Yellow 12 C. I. No. 21090	3	4	4	4	4	5	5	5	3	2	✱	✱	✱	✱	●	●	✱	160	4-5	4	4	●	✱	●	✱	180	4-5	3	✱	✱	●	●	●	✱		
Pigment Yellow 13 C. I. No. 21100	3-4	3	3-4	5	4-5	5	5	5	4-5	1-2	✱	✱	✱	✱	●	●	✱	200	4	3	4	●	✱	●	✱	200	5	4	✱	✱	✱	●	●	✱		
Pigment Yellow 14 C. I. No. 21095	4-5	3	4	5	5	5	5	5	4	2-3	✱	●	✱	✱	✱	✱	✱	180	4	4	4	●	✱	●	✱	200	4-5	4	✱	✱	✱	●	✱	✱		
Pigment Yellow 17 C. I. No. 21105	4-5	4	4	4	5	5	5	4-5	4	1	✱	✱	●	●	●	●	●	180	4-5	4-5	1	●	✱	●	✱	180	4-5	4	✱	✱	●	●	✱	✱		
Pigment Yellow 62 C. I. No. 13940	4-5	4	3	4-5	5	5	5	5	7-8	-	●	●	●	●	●	●	●	180	4-5	4-5	3	●	✱	✱	✱	200	7-8	4	✱	✱	●	✱	✱	●		
Pigment Yellow 65 C. I. No. 11740	4-5	4-5	4	2	5	5	4	4	6-7	4	●	●	●	●	●	●	✱	200	5	4	4	✱	✱	✱	✱	260	7	5	✱	✱	✱	✱	✱	✱		
Pigment Yellow 74 2GX C. I. No. 11741	4	2-3	3	3	4	5	5	5	6	3	●	●	●	●	●	●	✱	160	7	7	6	✱	✱	●	✱	160	7-8	3	●	✱	●	●	●	✱		
Pigment Yellow 74 5GX C. I. No. 11741	4	2-3	3	3	4	5	5	5	6	3	●	●	●	●	●	●	✱	160	7	7	6	✱	✱	●	✱	160	7-8	3	●	✱	●	●	●	✱		
✱ Recommended for use									✱ Some Restricted Use									● Not Recommended																		

 Pigment Name C.I. Pigment No. C.I. No.	Fastness to Solvents and Reagents								Printing Inks							Paints and Coatings								Plastic								 Tint Shade Full Shade				
	Ethanol	Xylene	Ethyl Acetate	M.E.K.	Mineral Spirit	Water	Acid	Alkali	Light Fastness	Transparency	Offset	Tin Printing	Applications				Fastness				Applications				Fastness				Application							
													Polyamide/NC	Chlorinated PP	Urethane	Flexo		Heat	Weather	Oven Spray	Hiding Power	Automobile	Industrial	Coil Coating	Decorative	Heat	Light	Migration	PVC	Low Density P.E.	High Density P.E./ P.P.			Polystyrene / ABS	Thermosetting	Textile
																Alcohol	Water																			
Pigment Yellow 83 C.I. No. 21108	3-4	3	3	3	5	5	4-5	4-5	7	1-2	✘	✘	✘	✘	●	✘	✘	200	5-6	4-5	5	✘	✘	✘	✘	220	7-8	5	✘	✘	✘	●	●	✘		
Pigment Yellow 168 C.I. No. 13960	3-4	3	3	3	4-5	5	4	4	6	4	-	-	-	-	-	-	200	5	4	4	✘	✘	✘	✘	200	6	4	✘	✘	✘	●	●	✘			
Pigment Yellow 183 C.I. No. 18792	5	5	5	5	5	5	5	5	7	3	✘	✘	●	●	●	●	✘	183	5	4	4					300	7	5	✘	✘	✘	✘	✘			
Pigment Yellow 191.1 C.I. No. 18795	5	4	5	4-5	5	5	5	5	8	3	✘	✘	✘	✘	●	✘	✘	200	5	4	4					>300	7	5	✘	✘	✘	✘	✘			
Pigment Red 2 C.I. No. 12310	4	5	2-3	4	5	5	2	4	7	3	●	✘	✘	●	●	✘	✘	140	4	3	4	✘	✘	●	✘	-	-	-	●	●	●	●	●	✘		
Pigment Red 3 C.I. No. 12120	4	5	3	3	5	5	3	3	7-8	-	●	●	●	●	●	●	●	140	4	4	4	●	✘	✘	✘	-	-	-	●	●	●	●	●	●		
Pigment Red 4 C.I. No. 12085	2-3	1-2	2-3	1-2	5	4-5	2	4	6	4	✘	✘	✘	●	●	✘	✘	100	3-4	-	-	●	✘	●	●	-	-	-	●	●	●	●	●	●		
Pigment Red 5 C.I.No. 12490	4-5	4	4	4	4-5	4-5	5	5	7	4	✘	✘	✘	✘	✘	✘	✘	180	5	4-5	5	✘	✘	✘	✘	-	-	-	✘	✘	✘	✘	●	✘		
Pigment Red 8 C.I. No. 12335	3	3	3	3	3	5	2	4	5	4	✘	●	●	●	●	●	✘	-	-	-	-	-	-	-	-	150	5	4	●	●	●	●	●	✘		
Pigment Red 12 C.I. No. 12385	3	2	2	2	3	5	3	4	5	4	✘	●	●	●	●	●	✘	140	5	4	3	✘	✘	●	●	150	5	5	✘	✘	●	●	●	✘		
Pigment Red 22 C.I. No. 12315	3	3	3	3	3	5	5	3	4	4	✘	✘	✘	●	●	●	✘	120	5	3	3	✘	✘	●	●	120	4	3	✘	✘	●	●	●	●		
✘ Recommended for use									✘ Some Restricted Use							● Not Recommended																				

 Pigment Name C.I. Pigment No. C.I. No.	Fastness to Solvents and Reagents								Printing Inks								Paints and Coatings								Plastic								 Full Shade Tint Shade			
	Ethanol	Xylene	Ethyl Acetate	M.E.K.	Mineral Spirit	Water	Acid	Alkali	Light Fastness	Transparency	Offset	Tin Printing	Applications				Fastness				Applications				Fastness				Application							
													Gravure		Flexo		Heat	Weather	Oven Spray	Hiding Power	Automobile	Industrial	Coil Coating	Decorative	Heat (10 Minutes)	Light	Migration	PVC	Low Density P.E.	High Density P.E./ P.P.	Polystyrene/ ABS	Thermosetting			Textile	
													Polyamide/NC	Chlorinated PP	Urethane	Alcohol																				Water
Pigment Red 31 C.I. No. 12360	4	3	4	4	5	5	4	5	5	3	✘	●	✘	✘	✘	✘	✘	✘	200	5	4	3	●	●	●	✘	-	-	-		✘	✘	✘	✘	✘	
Pigment Red 32 C.I. No. 12320	4	3	4	4	5	5	4	5	5	3	✘	●	✘	✘	✘	✘	✘	200	5	4	3	●	●	●	✘	-	-	-		✘	✘	✘	✘	✘		
Pigment Red 48:1 C.I. No. 15865:1	3-4	4-5	4-5	4	5	4-5	4	5	4	2	●	✘	✘	✘	✘	●	180	5	5	2	●	✘	●	●	180	4	5	✘	✘	✘	●	●	●			
Pigment Red 48:2 C.I. No. 15865:2	3-4	4-5	4-5	4	5	4-5	4	3	4	2	✘	✘	✘	✘	✘	✘	180	5	5	2	●	✘	●	●	200	4	5	✘	✘	✘	●	●	●			
Pigment Red 48:3 C.I. No. 15865:3	4-5	5	5	5	5	4-5	4	4-5	5	3	✘	●	✘	●	✘	✘	200	4	3	3	●	●	●	●	200	4	5	✘	✘	●	●	●	●			
Pigment Red 48:4 C.I. No. 15865:4	4-5	5	5	5	5	4-5	2	3-4	5	4	●	●	●	●	●	●	180	5	5	2	●	✘	✘	✘	180	-	-	✘	✘	✘	●	●	✘			
Pigment Red 49:1 C.I. No. 15630:1	2-3	4	5	5	5	5	4	4-5	5	2	✘	✘	●	✘	●	●	130	4	3	2	●	✘	●	●	-	-	-	●	●	●	●	●	●			
Pigment Red 49:2 C.I. No. 15630:2	4	3-4	3	3	4	5	4	4	4	5	✘	✘	✘	●	●	✘	130	5	4	3	✘	✘	●	✘	130	5-6	4	✘	✘	●	●	●	✘			
Pigment Red 53:1 C.I. No. 12585	2-3	4	3-4	4	4	4	5	4	4	2	✘	✘	✘	●	●	✘	180	4-5	3-4	4	●	✘	●	✘	200	3	5	✘	✘	✘	●	●	●			
Pigment Red 57:1 C.I. No. 12850	2	4	3	4-5	5	4	4	4	5	3	✘	●	✘	●	✘	✘	180	4-5	3-4	4	●	✘	●	✘	180	4	5	✘	✘	✘	●	●	✘			
✘ Recommended for use								✘ Some Restricted Use								● Not Recommended																				

 Pigment Name C.I. Pigment No. C.I. No.	Fastness to Solvents and Reagents								Printing Inks								Paints and Coatings								Plastic								 Full Shade Tint Shade			
	Ethanol	Xylene	Ethyl Acetate	M.E.K.	Mineral Spirit	Water	Acid	Alkali	Light Fastness	Transparency	Offset	Tin Printing	Applications				Fastness				Applications				Fastness				Application							
													Gravure		Flexo		Hiding Power	Automobile	Industrial	Coil Coating	Decorative	Heat (10 Minutes)	Light	Migration	PVC	Low Density P.E.	High Density P.E./ P.P.	Polystyrene / ABS	Thermosetting	Textile						
													Polyamide/NC	Chlorinated PP	Urethane	Alcohol															Water	Heat			Weather	Oven Spray
Pigment Red 63:1 C.I. No: 15880:1	3	4	4	3	3	5	3	3	4	4	✘	●	✘	●	●	✘	✘	150	3	3	3	●	●	●	●	150	3	4	✘	✘	●	●	●	●		
Pigment Red 63:2 C.I. No: 15880:2	3	4	4	3	3	5	3	3	6	4	✘	●	✘	●	●	✘	✘	-	-	-	-	-	-	-	-	150	5	4	✘	✘	●	●	●	●		
Pigment Red 112 C.I. No: 12370	4	5	5	5	5	5	5	5	7	4	✘	✘	●	●	●	●	✘	160	5	4	4	✘	✘	●	✘	-	-	-	●	●	●	●	●	✘		
Pigment Red 122 C.I. No: 73915	4-5	5	5	5	5	5	5	5	7-8	2-3			✘	✘	✘	✘	✘	160	7	4	4	✘	✘	●	✘	250	8	6		✘	✘	✘	✘	✘		
Pigment Red 146 C.I. No: 12485	4	3	4	4	5	5	4	5	5	3	✘	●	✘	✘	✘	✘	✘	200	5	4	3	●	●	●	✘	-	-	-		✘	✘	✘	✘	✘		
Pigment Red 170 C.I. No: 12475	4-5	4	4	4	5	5	5	5	6-7	3	✘	✘	●	●	●	●	✘	180	3-4	3-4	2	✘	✘	✘	✘	180	-	-	✘	✘	✘	●	●	✘		
Pigment Red 210 C.I. No: 12477	4-5	4	4	4	5	5	5	5	6-7	3	✘	✘	●	●	●	●	✘	180	3-4	3-4	2	✘	✘	✘	✘	180	-	-	✘	✘	✘	●	●	✘		
Pigment Red 266 C.I. No: 12474	4	3	4	4	5	5	4	5	5	3	✘	✘	✘	✘	✘	✘	✘	200	5	4	3	-	-	-	-	-	-	-	-	-	-	-	-	✘		
Pigment Red 268 C.I. No: 12316	4	3	4	4	5	5	4	5	5	3	✘	✘	✘	✘	●	✘	✘	200	5	4	3	✘	✘	✘	✘	-	-	-	-	-	-	-	-	✘		
Pigment Blue 15:0 C.I. No: 74160	5	4	5	5	5	5	5	5	7-8	3-4	●	●	●	●	●	●	✘	180	4	3	3	●	✘	●	✘	180	5-6	4	✘	✘	●	●	●	✘		
✘ Recommended for use								✘ Some Restricted Use								● Not Recommended																				

 Pigment Name C.I. Pigment No. C.I. No.	Fastness to Solvents and Reagents								Printing Inks								Paints and Coatings								Plastic								 Full Shade Tint Shade			
	Ethanol	Xylene	Ethyl Acetate	M.E.K.	Mineral Spirit	Water	Acid	Alkali	Light Fastness	Transparency	Offset	Tin Printing	Applications				Fastness				Applications				Fastness				Application							
													Gravure		Flexo		Heat	Weather	Oven Spray	Hiding Power	Automobile	Industrial	Coil Coating	Decorative	Heat	Light	Migration	PVC	Low Density P.E.	High Density P.E./P.P.	Polystyrene/ABS	Thermosetting			Textile	
													Polyamide/NC	Chlorinated PP	Urethane	Alcohol																				Water
Pigment Blue 15:1 C.I. No:74160	5	5	5	5	5	5	5	5	7-8	3-4	●	●	●	●	●	●	✘	180	4	3	3	✘	✘	✘	✘	200	5-6	4	✘	✘	✘	✘	✘	✘	✘	
Pigment Blue 15:3 C.I. No:74160	5	5	5	5	5	5	5	5	7-8	3-4	✘	✘	✘	✘	●	●	✘	>200	7-8	5	4	✘	✘	✘	✘	220	8	5	✘	✘	✘	✘	●	●	✘	
Pigment Blue 15:4 C.I. No:74160	5	5	5	5	5	5	5	5	7-8	4	✘	✘	✘	✘	✘	✘	✘	>200	8	4	4	✘	✘	✘	✘	260	8	5	✘	✘	✘	✘	●	●	✘	
Pigment Orange 5 C.I. No:12075	2	2	2	2	4	4	4-5	4-5	6-7	4	✘	●	✘	●	●	●	✘	160	2-3	2-3	2	●	✘	●	✘	150 <small>(10min)</small>	-	-	●	●	●	●	●	●	✘	
Pigment Orange 13 C.I. No:21110	3	2	3	3	5	5	5	5	5-6	2-3	✘	●	●	✘	●	✘	✘	180	3-4	3-4	3	●	●	●	✘	180	5	4-5	✘	✘	●	●	●	●	✘	
Pigment Orange 34 C.I. No:21115	4	2	3	5	5	5	4	4	7-8	3	✘	✘	●	✘	●	✘	✘	200	4-5	3-4	4	●	✘	✘	✘	200	5	4-5	✘	✘	●	●	●	●	✘	
Pigment Green 7 C.I. No:74260	5	5	5	5	5	5	5	5	8	3-4	✘	✘	✘	✘	✘	✘	✘	>200	8	5	3-4	✘	✘	✘	✘	200	8	5	✘	✘	✘	✘	✘	✘	✘	
Pigment Violet 19 C.I. No:73900	5	5	5	5	5	5	5	5	7-8	3	✘	✘	✘			✘	✘	-	-	-	-	-	-	-	-	250	7-8	5	✘	✘	✘	✘	✘	✘	✘	
Pigment Violet 23 C.I. No:51319	5	5	5	5	5	5	5	5	7	5	✘	✘	✘	✘	✘	✘	✘	200	7	5	5	✘	✘	✘	✘	200	7	4	✘	✘	✘	✘	✘	✘	✘	
✘ Recommended for use								✘ Some Restricted Use								● Not Recommended																				

FASTNESS OF PIGMENT POWDER

1 Fastness to Solvents	1 : Drastic Bleeding	5 : No Bleeding
2 Fastness to Water	1 : Drastic Bleeding	5 : No Bleeding
3 Fastness to Reagents	1 : Drastic Discolouration	5 : No Discolouration

FASTNESS, PHYSICAL PROPERTIES AND AREA OF APPLICATION IN PRINTING INKS

1 Fastness to Light	1 : Poor Light Fastness	8 : Excellent Light Fastness
2 Transparency	1 : High Transparency	5 : High Opacity

FASTNESS, PHYSICAL PROPERTIES AND AREA OF APPLICATION IN PAINTS AND COATINGS

1 Fastness to Weather	1 : Poor Weather Fastness	8 : Excellent Weather Fastness
2 Fastness to Overspray	1 : Heavy Bleeding	5 : No Bleeding
3 Hiding Power	1 : High Transparency	5 : High Opacity

FASTNESS, PHYSICAL PROPERTIES AND AREA OF APPLICATION IN PLASTICS

1 Fastness to Light	1 : Poor Light Fastness	8 : Excellent Light Fastness
2 Fastness to Migration	1 : Heavy Migration	5 : No Migration

All values and figures reported in this shade card are based on our laboratory tests, test methods, test equipments, and test conditions only. However further clarifications on product recommendation and applications can be given up on request the technical services department.

This information is based on our present stage of knowledge and is intended to provide **general notes on our products and their uses. It should not therefore be construed** as guaranteeing specific properties of the products described or their suitability for a particular application. Any existing industrial property rights must be observed. **The quality of our products is guaranteed under our general condition of sale.**