

COLOR NAME	PIGMENT CLASSIFICATION	COLOR INDEX NAME	COLOR INDEX NUMBER	CHEMICAL DESCRIPTION	OPACITY TRANSPARENCY	LIGHTFASTNESS RATING	PERMANENCY	MUNSELL HUE	MUNSELL HUE SUFFIX	MUNSELL VALUE	MUNSELL CHROMA	GLOSS AVERAGE	VISCOSITY RANGE	CIE L	CIE A	CIE B
Primary Yellow	Organic	PY175 / PW6 / PY74	11710 / 11738 / 77891	Benzimidazolone Yellow H6G / Titanium Dioxide Rutile / Arylide Yellow 5GX	Semi-Transparent	1	Excellent	4.6		8	13	44.27	400-1000 CPS	84.6	7.27	90.03
Benzimidazolone Yellow Light	Synthetic Organic	PY175	11784	Benzimidazolone Yellow H6G	Transparent	1	Excellent	5	Y	8.4	13		N/A	83.43	4.73	91.99
Benzimidazolone Yellow Medium	Synthetic Organic	PY154	11781	Benzimidazolone Yellow H3G	Semi-Transparent	1	Excellent	2.6	Y	8.1	14		N/A	80.04	15.76	93.13
Hansa Yellow Opaque	Organic	PY74	11741	Arylide Yellow 5GX	Semi-Opaque	1	Excellent	5			16	78.28	400-1000 CPS	85.41	11.09	93.99
Cadmium Yellow Medium Hue	Organic	PY74 / PY175 / PY83(HR70)	21108 / 77788 / 11710	Arylide Yellow 5GX / Benzimidazolone Yellow H6G / Diarylide Yellow HR70	Semi-Opaque	1	Excellent	1.5			13.7	73.8	400-1000 CPS	81.47	16.5	78.94
Nickel Azo Yellow	Organic	PY150	12764	Nickel Complex Azo	Transparent	1	Excellent	3.5		4.7	9	94.21	400-1000 CPS	52.06	12.26	40.34
India Yellow Hue	Organic	PY175 / PY150 / PR206	11738 / 12764 / 73903	Benzimidazolone Yellow H6G / Nickel Complex Azo / Quinacridone	Transparent	1	Excellent	5	Y	5.3	9.5	86.88	400-1000 CPS	55.2	28.9	48.11
Quinacridone / Nickel Azo Gold	Organic	PY150 / P048	73900 / 73920 / 12764	Nickel Complex Azo / Quinacridone	Transparent	1	Excellent	2.2	Y	3	4	83	400-1000 CPS	34.34	18.65	14.23
Azo Gold	Mixture	PR101 / PY150	77491 / 12764	Synthetic Iron Oxide / Nickel Complex Azo	Transparent	ASTM 1	Excellent									
Diarylide Yellow	Organic	PY83(HR70)	21108	Diarylide Yellow HR70	Semi-Opaque	1	Excellent	8	Y		15.8	85.52	400-1000 CPS	75.48	33.38	80.36
Vat Orange	Organic	P043	71105	Perinone Orange	Semi-Opaque	1	Excellent	10		5.2	15.3	88.03	400-1000 CPS	54.19	53.46	48.12
Pyrrrole Orange	Organic	P073	561170	Diketopyrrole-pyrrole	Semi-Opaque	1	Excellent	9			18	70.05	400-1000 CPS	55.97	59.52	53.43
Pyrrrole Red Light	Organic	PR255	561050	Diketopyrrole-pyrrole	Semi-Opaque	1	Excellent	8		4.2	17	88.92	400-1000 CPS	47.7	56.46	37.62
Naphthol Red Light	Organic	PR112	12370	Naphthol AS-D	Semi-Transparent	2	Very Good	7		4.2	17	49.2	400-1000 CPS	44.02	50.85	32.4
Pyrrrole Red	Organic	PR254	56110	Diketopyrrole-pyrrole	Semi-Opaque	1	Excellent	6.5		4.2	17	88.11	700-1000 CPS	42.26	54.6	31.25
Cadmium Red Medium Hue	Organic	PR112 / PR5	12370 / 12490	Naphthol AS-D / Naphthol ITR	Semi-Transparent	2	Very Good	9		3	13.4	74.7	400-1000 CPS	42.05	48.29	29.06
Primary Magenta	Organic	PV19	73900	Quinacridone	Semi-Opaque	1	Excellent	4.6		4	11.4	21.7	400-1000 CPS	40.82	46.03	21.21
Light Magenta	Mixture	PW6 / PR112	77891 / 12370	Titanium Dioxide Rutile / Naphthol AS-D	Semi-Opaque	ASTM 2	Very Good									
Naphthol Red Medium	Organic	PR5	12490	Naphthol ITR	Semi-Opaque	2	Very Good	6		3	10.6	80.08	700-1000 CPS	36.83	38.81	20.83
Quinacridone Red	Organic	PV19	73900	Quinacridone	Transparent	1	Excellent	2.5		3.2	12	82.26	400-1000 CPS	37.74	40.88	15.2
Alizarin Crimson Hue	Organic	PR206 / PR122 / PG7	73915 / 73903 / 74260	Quinacridone / Quinacridone / Chlorinated Copper Phthalocyanine	Transparent	1	Excellent	10	R	2	1.2	100.92	400-1000 CPS	27.94	9.37	2.19

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Quinacridone Magenta	Organic	PR122	73915	Quinacridone	Transparent	1	Excellent	10	R	2	10	97.99	400-1000 CPS	31.41	27.69	2.75
Quinacridone Violet	Organic	PV19	73900	Quinacridone	Transparent	1	Excellent	10	R	2	8	80.25	400-1000 CPS	29.4	22.71	6.07
Permanent Violet Dark	Mixture	PR122 / PB60	69800 / 73915	Quinacridone / Indanthrone	Transparent	1	Excellent	3	R	1	3	97.79	400-1000 CPS	26.64	7.65	-5.02
Ultramarine Violet	Inorganic	PV15	77007	Polysulfide of Sodium-Alumino-Silicate	Transparent	1		2.5		2	2	15.93	600-1000 CPS	25.37	8.43	-15.84
Dioxazine Purple	Organic	PV23	51319	Carbazole Dioxazine	Transparent	2	Very Good	2.5			0.5	90.47	400-1000 CPS	24.76	2.81	-0.17
Ultramarine Blue	Inorganic	PB29	77007	Polysulfide of Sodium-Alumino-Silicate	Semi-Transparent	1		8	P		4	23.89	400-1000 CPS	24.36	12.28	-25.74
Light Ultramarine Blue	Mixture	PW6 / PB29	77891 / 77007	Titanium Dioxide Rutile / Polysulfide of Sodium-Alumino-Silicate	Opaque	ASTM 1	Excellent									
Cobalt Blue	Inorganic	PB28	77346	Oxides of Cobalt and Aluminum	Semi-Transparent	1	Excellent	6	P		11	69.45	800-1200 CPS	36.63	9.51	
Cerulean Blue, Chromium	Inorganic	PB36	---	Cobalt Chromate Spinel	Semi-Opaque	1	Excellent	1	P		7.9	21.44	400-1000 CPS	42.76	-12.04	-32.29
Anthraquinone Blue	Organic	PB60	69800	Indanthrone	Semi-Transparent	1	Excellent	7.5	P	1.2	3.3	94.74	400-1000 CPS	24.44	5.02	-6
Prussian Blue Hue	Mixture	PBk9 / PB15:0 / PV23	74160 / 51319 / 77267	Amorphous Carbon produced by charring animal bones / Copper Phthalocyanine / Carbazole Dioxazine	Semi-Transparent	2	Very Good	8		2.4	1.5	73.78	400-1000 CPS	24.61	2.16	-3.37
Phthalo Blue (Red Shade)	Organic	PB15:0	74160	Copper Phthalocyanine	Transparent	1	Excellent	7.5	P	1.2	6	95.07	400-1000 CPS	24.42	5.29	-9.99
Phthalo Blue (Green Shade)	Organic	PB15:3	74160	Copper Phthalocyanine	Transparent	1	Excellent	7	P	1.2	6.5	94.21	400-1000 CPS	24.95	8.48	-18.01
Light Phthalo Blue	Mixture	PW6 / PB15:3	77891 / 74160	Titanium Dioxide Rutile / Copper Phthalocyanine	Semi-Opaque	ASTM 1	Excellent									
Primary Cyan	Mixture	PB15:3 / PW6	74160 / 77891	Copper Phthalocyanine / Titanium Dioxide Rutile	Semi-Opaque	1	Excellent	5.4	P	3	8.4	19.25	400-1000 CPS	34.97	-3.22	-32.28
Cerulean Blue Deep	Inorganic	PB36	77343	Cobalt Chromate Spinel	Semi-Opaque	1	Excellent	1.2	P		7.9	53.2	400-1000 CPS	38.25	-16.56	-23.26
Manganese Blue Hue	Mixture	PW6 / PB15:3 / PG7	74160 / 74260 / 77947	Titanium Dioxide Rutile / Copper Phthalocyanine / Chlorinated Copper Phthalocyanine	Semi-Transparent	1	Excellent	6		3.9	7.3	91.61	400-1000 CPS	41.18	-14.38	-31.78
Teal	Mixture	PW6 / PG7 / PB15:3	77891 / 74160 / 74260	Titanium Dioxide Rutile / Chlorinated Copper Phthalocyanine / Copper Phthalocyanine	Opaque	1	Excellent	9.3	B	5	9.4	83.7	20000-24000 CPS	62.4	-45.25	-13.35
Cobalt Teal	Synthetic Inorganic	PG50	77377	Oxides of Nickel, Cobalt and Titanium	Semi-Opaque	1	Excellent	8.8	BG	5.5	9		N/A	58.58	-43.11	-12.36
Turquoise (Phthalo)	Mixture	PG7 / PB15:3	74160 / 74260	Chlorinated Copper Phthalocyanine / Copper Phthalocyanine	Transparent	1	Excellent	5	B	1.2	2.6	93.44	400-1000 CPS	25.76	-1.64	-8.12
Cobalt Turquoise	Inorganic	PB36	77343	Cobalt Chromate Spinel	Semi-Opaque	1	Excellent	10	B	3.7	7.8	51.82	600-1000 CPS	43.88	-28.92	-9.45

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Phthalo Green (Blue Shade)	Organic	PG7	74260	Chlorinated Copper Phthalocyanine	Transparent	1	Excellent	5	B	1.2	5	94.02	400-1000 CPS	27.19	-8.89	-4.8
Viridian Green Hue	Mixture	PW6 / PB15:3 / PY150 / PBr7	77947 / 74160 / 12764 / 77492	Titanium Dioxide Rutile / Copper Phthalocyanine / Nickel Complex Azo / Natural Iron Oxide containing Manganese	Semi-Transparent	1	Excellent	8.8		3.5	5	20.58	400-1000 CPS	35.64	-24.01	0.39
Phthalo Green (Yellow Shade)	Organic	PG36	74265	Brominated and Chlorinated Copper Phthalocyanine	Transparent	1	Excellent	5		1.7	5.4	93.74	400-1000 CPS	27.82	-11.83	-0.17
Permanent Green Light	Mixture	PY175 / PG7 / PW6	11710 / 74260	Benzimidazolone Yellow H6G / Chlorinated Copper Phthalocyanine / Titanium Dioxide Rutile	Semi-Opaque	1	Excellent	4		3.7	12	80.05	400-1000 CPS	43.54	-46.94	17.96
Jenkins Green	Mixture	PBk9 / PG36 / PY150	77267 / 12764 / 74265	Amorphous Carbon produced by charring animal bones / Brominated and Chlorinated Copper Phthalocyanine / Nickel Complex Azo	Semi-Transparent	1	Excellent	8	G	1	2.4	53.26	400-1000 CPS	26.47	-3.3	-0.58
Sap Green Hue	Mixture	PR101 / PG36 / PY150 / PBk7	77491 / 12764 / 74265 / 77266	Synthetic Iron Oxide / Brominated and Chlorinated Copper Phthalocyanine / Nickel Complex Azo / Nearly Pure Amorphous Carbon	Transparent	1	Excellent	0.75		2.7	1.2	96.24	400-1000 CPS	27.81	-3.43	1.3
Chromium Oxide Green	Inorganic	PG17	77288	Anhydrous Chromium Sesquioxide	Opaque	1	Excellent	9	G		4.6	50.6	750-1000 CPS	44.19	-15.5	16.04
Green Gold	Mixture	PY150 / PG36 / PY175	12764 / 74265 / 11710	Nickel Complex Azo / Brominated and Chlorinated Copper Phthalocyanine / Benzimidazolone Yellow H6G	Transparent	1	Excellent	2	G	4.2	7.3	93.13	400-1000 CPS	47.2	-12.25	32.2
Titan Green Pale	Mixture	PW6 / PY42 / PBr7 / PG7	77891, 77492, 77492, 74260	Titanium Dioxide Rutile / Synthetic Hydrated Iron Oxide / Natural Iron Oxide containing Manganese / Chlorinated Copper Phthalocyanine	Opaque	1	Excellent	5.9	GY	8	1.7		N/A	80.49	-4.97	11.74
Titan Buff	Inorganic	PW6:1 / PW6	77891	Titanium Dioxide Rutile / Titanium Dioxide Rutile	Semi-Opaque	1	Excellent	4.5		8.2	2.8	35.52	400-1000 CPS	84.57	2.01	16.99
Naples Yellow Hue	Mixture	PW6:1 / PW6 / PY42 / PY83(HR70)	77891 / 77492 / 21108	Titanium Dioxide Rutile / Titanium Dioxide Rutile / Synthetic Hydrated Iron Oxide / Diarylide Yellow HR70	Semi-Opaque	1	Excellent	10	Y	7	6.7	56.41	400-1000 CPS	77.26	12.1	38.74
Yellow Ochre	Inorganic	PY43	77492	Natural Hydrated Iron Oxide	Semi-Opaque	1	Excellent	9.5	Y		8.8	62.36	650-1000 CPS	57.53	16.17	37.79
Yellow Oxide	Inorganic	PY42	77492	Synthetic Hydrated Iron Oxide	Semi-Opaque	1	Excellent	9.5	Y		8.4	79.21	400-1000 CPS	61.2	15.03	43.46
Transparent Yellow Iron Oxide	Inorganic	PY42	77492	Synthetic Hydrated Iron Oxide	Transparent	1	Excellent	8	Y	4	6	97.22	400-1000 CPS	48.08	16.36	25.53
Raw Sienna	Inorganic	PY43	77492	Natural Hydrated Iron Oxide	Semi-Transparent	1	Excellent	9	Y	4	6.6	27.98	750-1000 CPS	88.09	4.82	12.73
Titan Mars Pale	Mixture	PW6 / PBr6	77891 / 77491 & 2	Titanium Dioxide Rutile / Mixture of Synthetic Iron Oxides	Semi-Opaque	ASTM 1	Excellent									
Transparent Red Iron Oxide	Inorganic	PR101	77491	Synthetic Iron Oxide	Transparent	1	Excellent	5	Y	2	6	43.15	400-1000 CPS	32.8	16.85	8.85
Red Oxide	Inorganic	PR101	77491	Synthetic Iron Oxide	Opaque	1	Excellent	10			7.8	76.82	600-1000 CPS	67.39	19.45	7.31
Violet Oxide	Inorganic	PR101	77491	Synthetic Iron Oxide	Opaque	1	Excellent	0.5	Y	2.7	5.5	65.9	400-1000 CPS	32.13	17.48	8.24

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Burnt Sienna	Inorganic	PBr7	77491	Calcined Natural Iron Oxide	Semi-Opaque	1	Excellent	3	Y	3.2	4	13.63	750-1000 CPS	33.67	16.86	12.58
Burnt Umber Light	Inorganic	PBr7	77491	Calcined Natural Iron Oxide containing Manganese	Semi-Opaque	1	Excellent	8	Y		1.6	21.69	400-1000 CPS	30.12	6.41	8.95
Raw Umber	Inorganic	PBr7	77492	Natural Iron Oxide containing Manganese	Semi-Opaque	1	Excellent	3		2	1.3	16.59	400-1000 CPS	29.25	1.04	2.67
Van Dyke Brown Hue	Mixture	PR101 / PBk7	77491 / 77266	Synthetic Iron Oxide / Nearly Pure Amorphous Carbon	Semi-Opaque	1	Excellent	5	G	2	0.7	99.81	400-1000 CPS			
Carbon Black	Inorganic	PBk7	77266	Nearly Pure Amorphous Carbon	Opaque	1	Excellent	0			0.3	79.23	400-1000 CPS	25.77	0.2	-0.17
Bone Black	Inorganic	PBk9	77267	Amorphous Carbon produced by charring animal bones	Semi-Transparent	1	Excellent	0			0.5	32.62	600-1000 CPS	24.58	-0.03	-0.46
Payne's Gray	Mixture	PB29 / PBk7	77007 / 77266	Polysulfide of Sodium-Alumino-Silicate / Nearly Pure Amorphous Carbon	Semi-Transparent	1	Excellent	4	P	1.7	0.6	29.3	400-1000 CPS	24.12	0.05	-2.24
Zinc White	Inorganic	PW4	77947	Zinc Oxide	Transparent	1	Excellent	10		1	1.5	58.87	800-1100 CPS	95.83	-0.49	0.56
Titanium White	Inorganic	PW6	77891	Titanium Dioxide Rutile	Semi-Opaque	1	Excellent	10		1	1.1	43.15	900-1000 CPS	98.28	-0.9	1.67
Iridescent Copper Light (Fine)	Inorganic	N/A	N/A	Iron Oxide Coated Mica Particles	Opaque	N/A	Excellent					43.45	750-1000 CPS			
Iridescent Copper (Fine)	Inorganic	N/A	N/A	Iron Oxide Coated Mica Particles	Opaque	N/A	Excellent					41.82	750-1000 CPS			
Iridescent Bronze (Fine)	Mixture	N/A / PG7	/ 74260	Iron Oxide Coated Mica Particles / Chlorinated Copper Phthalocyanine	Opaque	N/A	Excellent					44.05	750-1000 CPS			
Iridescent Gold (Fine)	Inorganic	N/A	N/A	Titanium Dioxide and Iron Oxide Coated Mica Particles	Semi-Transparent	N/A	Excellent					35.19	750-1000 CPS			
Iridescent Gold Deep (Fine)	Inorganic	N/A	N/A	Titanium Dioxide and Iron Oxide Coated Mica Particles	Semi-Opaque	N/A	Excellent					30.3	750-1000 CPS			
Iridescent Bright Gold (Fine)	Mixture	N/A / PY150 / PR206	/ 12764 / 73903	Titanium Dioxide and Iron Oxide Coated Mica Particles / Nickel Complex Azo / Quinacridone	Semi-Transparent	N/A	Excellent					42.8	750-1000 CPS			
Iridescent Pearl (Fine)	Inorganic	N/A	N/A	Titanium Dioxide coated Mica particles	Semi-Transparent	N/A	Excellent					36.33	750-1000 CPS			
Iridescent Silver (Fine)	Inorganic	N/A / PBk7	/ 77266	Titanium Dioxide coated Mica particles / Nearly Pure Amorphous Carbon	Semi-Opaque	N/A	Excellent					37.66	750-1000 CPS			
Iridescent Stainless Steel (Coarse)	Inorganic	N/A	N/A	Iron, Chromium, Nickel	Semi-Transparent	N/A	Excellent					25.48	750-1000 CPS			
Micaceous Iron Oxide	Inorganic	PR101	77491	Specular Hematite Ore	Semi-Opaque	N/A	Excellent					1.14	N/A			

