

Number	Name	tube	full wash	thin wash	Opacity	Lightfastness	St/G	Pigments	R	G	B	L*	a*	b*	R	G	B	L*	a*	b*
722	Winsor lemon				ST	A	St	PY175	255	210	65	88.6	1.8	74.7	247	224	53	90.5	-8.8	76.3
730	Winsor yellow				ST	A I	St	PY154	255	197	0	86.9	9.4	98.4	255	212	0	88.7	-1.9	86.9
653	Transparent yellow				T	A I	St	PY150	193	114	22	57.8	26.8	60.3	243	197	36	83.7	2.6	76.8
267	New gamboge				ST	A II		PY150 - PR209 (ex PY153)	255	151	0	75.1	31.0	85.6	250	212	110	88.1	1.2	55.3
319	Indian yellow				T	A II		PY139 - PO62 (ex PY153 - PO62)	255	140	0	73.9	39.4	82.8	255	175	0	81.0	20.9	85.7
	Yellow titanate				O	AA I	GSt	PBr24	210	135	55	64.9	22.6	55.2	246	195	126	83.6	10.4	43.0
	Transparent orange				T	A I		PO107	195	56	43	47.8	61.5	44.1	250	157	108	75.3	32.0	43.6
603	Scarlet lake				ST	A II	St	PR188	200	50	35	48.2	64.6	49.5	234	85	71	59.2	62.2	44.5
576	Rose doré				T	A II	St	PV19 - PY97	228	84	79	58.1	61.5	38.1	232	133	129	67.8	42.4	22.1
548	Quinacridone red				T	A II		PR209	202	58	62	49.4	62.6	37.3	222	68	75	54.7	64.7	37.8
466	Permanent alizarin crimson				T	A	St	PR206 - n/a	163	47	61	40.0	55.6	23.9	197	75	93	51.0	57.4	20.0
502	Permanent rose				T	A II	St	PV19	170	47	60	41.6	57.3	27.2	238	136	163	69.7	46.4	7.0
545	Quinacridone magenta				T	A	St	PR122	140	45	70	35.3	50.0	11.2	224	161	187	73.3	31.8	-2.6
733	Winsor violet (dioxazine)				T	A	St	PV23	64	52	57	23.2	6.5	-0.5	154	139	187	59.7	18.4	-23.3
	Dumont's blue (smalt)				ST	AA I	St	PV15	47	48	65	19.7	3.8	-11.1	145	170	230	67.8	7.5	-35.3
180	Cobalt blue deep				ST	AA	G	PB74	0	88	191	34.1	23.5	-66.4	178	199	221	78.3	-0.7	-15.2
263	French ultramarine				T	A I *	G	PB29	0	57	170	23.7	36.5	-71.1	177	202	222	78.9	-2.4	-14.5
178	Cobalt blue				ST	AA I	G	PB28	0	114	192	41.0	5.6	-57.0	148	191	221	73.7	-4.5	-22.2
	Phthalo sapphire				T	A I		PB15:6	44	54	96	21.8	11.8	-29.0	56	145	197	54.3	-7.1	-39.5
707	Winsor blue (green shade)				T	A II	St	PB15	34	61	99	23.4	7.3	-29.4	70	173	202	63.5	-19.3	-28.8
137	Cerulean blue				SO	AA I	G	PB35	0	134	174	47.0	-20.6	-38.2	109	188	206	70.0	-18.4	-20.4
184	Cobalt green				SO	AA	G	PG50	0	139	115	50.1	-41.8	-0.3	130	203	174	75.5	-30.7	4.1
719	Winsor green (blue shade)				T	A I	St	PG7	0	87	70	30.2	-28.6	-1.9	86	194	159	70.1	-40.1	3.3
692	Viridian				T	AA I	G	PG18	0	113	78	39.3	-45.8	5.2	115	192	162	71.3	-31.2	4.5
721	Winsor green (yellow shade)				T	A I	St	PG36	0	90	58	31.9	-34.9	8.5	72	182	115	65.9	-49.8	20.5
637	Terre verte				ST	AA I	G	PG23 - PG18 - PB28	113	140	114	55.2	-14.9	8.7	173	193	167	75.8	-11.4	9.1
460	Perylene green				T	A	St	PBk31	57	54	54	22.6	2.4	0.5	152	163	148	65.8	-7.1	6.3
503	Permanent sap green				T	A I	St	PG36 - PY110	82	99	45	40.2	-22.7	28.9	137	155	73	62.1	-26.2	40.9
459	Oxide of chromium				O	AA I	GSt	PG17	78	99	76	39.6	-15.4	11.1	148	162	117	65.1	-15.5	22.8
447	Olive green				T	A II	St	PY65 - PB15:6 - PR101 (ex PY42 - PG7)	66	72	46	29.6	-9.7	15.2	190	173	110	72.0	-4.6	36.0
294	Green gold				T	A		PY129	129	100	43	45.5	3.9	37.5	239	211	112	86.5	-2.9	52.3
744	Yellow ochre				SO	AA I		PY43	199	122	50	60.5	24.5	52.9	240	166	79	76.1	18.8	57.2
552	Raw sienna				T	AA I	G	PY42 - PR101	208	131	59	63.8	24.0	52.4	240	161	61	75.0	20.3	63.5
547	Quinacridone gold				T	A	St	PR206 - PV19 - PY150	196	125	38	60.6	24.5	56.3	229	173	71	76.0	12.8	58.5
	Gold brown				O	AA I	St	PBk12	163	106	62	51.5	19.4	35.5	232	183	137	79.3	12.3	32.1
059	Brown ochre				ST	AA I	G	PBr7	196	105	57	56.5	35.0	45.8	227	148	88	70.2	26.2	45.9
074	Burnt sienna				T	AA I		PR101	145	67	57	39.9	36.6	24.7	218	133	86	65.7	31.2	41.5
507	Perylene maroon				T	A	St	PR179	101	51	49	28.8	28.1	13.5	170	81	79	47.3	43.0	22.5
470	Perylene violet				T	A	St	PV29	83	53	53	26.3	17.8	7.2	151	100	109	48.8	26.1	6.3
	Indian red deep				T	A I		PBr25	81	59	50	27.5	10.4	10.1	209	132	111	64.3	29.4	27.6
554	Raw umber				T	AA I	G	PBr7	144	92	53	45.4	18.2	32.9	234	188	127	80.6	9.4	38.1
	Dark brown				O	AA I	St	PY164	85	69	67	31.1	7.1	4.6	157	134	122	58.1	8.5	10.5
076	Burnt umber				T	AA I		PBr7 - PR101 - PY42	70	56	53	24.9	6.8	4.8	186	125	77	59.2	20.6	37.3
322	Indigo				O	A II	St	PBk6 - PV19 - PB15	46	45	52	18.4	2.9	-4.7	67	101	119	39.6	-5.7	-16.2
465	Payne's grey				SO	A II	St	PB15 - PBk6 - PV19	57	54	58	22.7	3.0	-2.1	125	144	149	57.7	-4.9	-6.1
430	Neutral tint				O	A II	St	PB15 - PBk6 - PV19	60	57	59	24.3	1.5	-0.6	97	96	101	40.6	1.9	-2.9
331	Ivory black				O	AA I	G	PBk9	57	57	57	23.7	0.3	0.0	181	172	159	71.0	1.2	8.0
217	Davy's grey				SO	AA I		PG17 - PBk6 - PW5 - PBk19 (ex G17 - PBk6 - PW4 - PBk19)	121	126	117	52.3	-4.4	4.9	218	213	195	85.5	-1.4	9.6
150	Chinese white				SO	AA I		PW4	239	233	220	92.5	0.5	6.9	237	233	223	92.4	0.0	5.4
644	Titanium white				O	AA I		PW6	239	239	239	94.4	0.2	-0.1	240	238	233	94.0	0.3	2.3
0	Titanium white (gouache)				O	AA I		PW6	241	240	237	94.8	0.1	1.3	241	238	232	94.2	0.3	3.1
								* = bleached by acids	(tube)						(wash)					
	Colours scanned and pasted in from patch samples. Colour values measured using ColorMunki®.																			
	Note that all colour values are approximate.																			
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Number	Name	tube	full wash	thin wash	Opacity	Lightfastness	St/G	Pigments	R	G	B	L*	a*	b*	R	G	B	L*	a*	b*
059	Brown ochre				ST	AA I	G	PBr7	196	105	57	56.5	35.0	45.8	227	148	88	70.2	26.2	45.9
074	Burnt sienna				T	AA I		PR101	145	67	57	39.9	36.6	24.7	218	133	86	65.7	31.2	41.5
076	Burnt umber				T	AA I		PBr7 - PR101 - PY42	70	56	53	24.9	6.8	4.8	186	125	77	59.2	20.6	37.3
137	Cerulean blue				SO	AA I	G	PB35	0	134	174	47.0	-20.6	-38.2	109	188	206	70.0	-18.4	-20.4
150	Chinese white				SO	AA I		PW4	239	233	220	92.5	0.5	6.9	237	233	223	92.4	0.0	5.4
178	Cobalt blue				ST	AA I	G	PB28	0	114	192	41.0	5.6	-57.0	148	191	221	73.7	-4.5	-22.2
180	Cobalt blue deep				ST	AA	G	PB74	0	88	191	34.1	23.5	-66.4	178	199	221	78.3	-0.7	-15.2
184	Cobalt green				SO	AA	G	PG50	0	139	115	50.1	-41.8	-0.3	130	203	174	75.5	-30.7	4.1
	Dark brown				O	AA I	St	PY164	85	69	67	31.1	7.1	4.6	157	134	122	58.1	8.5	10.5
217	Davy's grey				SO	AA I		PG17 - PBk6 - PW5 - PBk19 (ex G17 - PBk6 - PW4 - PBk19)	121	126	117	52.3	-4.4	4.9	218	213	195	85.5	-1.4	9.6
	Dumont's blue (smalt)				ST	AA I	St	PV15	47	48	65	19.7	3.8	-11.1	145	170	230	67.8	7.5	-35.3
263	French ultramarine				T	A I *	G	PB29	0	57	170	23.7	36.5	-71.1	177	202	222	78.9	-2.4	-14.5
	Gold brown				O	AA I	St	PBk12	163	106	62	51.5	19.4	35.5	232	183	137	79.3	12.3	32.1
294	Green gold				T	A		PY129	129	100	43	45.5	3.9	37.5	239	211	112	86.5	-2.9	52.3
	Indian red deep				T	A I		PBr25	81	59	50	27.5	10.4	10.1	209	132	111	64.3	29.4	27.6
319	Indian yellow				T	A II		PY139 - PO62 (ex PY153 - PO62)	255	140	0	73.9	39.4	82.8	255	175	0	81.0	20.9	85.7
322	Indigo				O	A II	St	PBk6 - PV19 - PB15	46	45	52	18.4	2.9	-4.7	67	101	119	39.6	-5.7	-16.2
331	Ivory black				O	AA I	G	PBk9	57	57	57	23.7	0.3	0.0	181	172	159	71.0	1.2	8.0
430	Neutral tint				O	A II	St	PB15 - PBk6 - PV19	60	57	59	24.3	1.5	-0.6	97	96	101	40.6	1.9	-2.9
267	New gamboge				ST	A II		PY150 - PR209 (ex PY153)	255	151	0	75.1	31.0	85.6	250	212	110	88.1	1.2	55.3
447	Olive green				T	A II	St	PY65 - PB15:6 - PR101 (ex PY42 - PG7)	66	72	46	29.6	-9.7	15.2	190	173	110	72.0	-4.6	36.0
459	Oxide of chromium				O	AA I	GS	PG17	78	99	76	39.6	-15.4	11.1	148	162	117	65.1	-15.5	22.8
465	Payne's grey				SO	A II	St	PB15 - PBk6 - PV19	57	54	58	22.7	3.0	-2.1	125	144	149	57.7	-4.9	-6.1
466	Permanent alizarin crimson				T	A	St	PR206 - n/a	163	47	61	40.0	55.6	23.9	197	75	93	51.0	57.4	20.0
502	Permanent rose				T	A II	St	PV19	170	47	60	41.6	57.3	27.2	238	136	163	69.7	46.4	7.0
503	Permanent sap green				T	A I	St	PG36 - PY110	82	99	45	40.2	-22.7	28.9	137	155	73	62.1	-26.2	40.9
460	Perylene green				T	A	St	PBk31	57	54	54	22.6	2.4	0.5	152	163	148	65.8	-7.1	6.3
507	Perylene maroon				T	A	St	PR179	101	51	49	28.8	28.1	13.5	170	81	79	47.3	43.0	22.5
470	Perylene violet				T	A	St	PV29	83	53	53	26.3	17.8	7.2	151	100	109	48.8	26.1	6.3
	Phthalo sapphire				T	A I		PB15:6	44	54	96	21.8	11.8	-29.0	56	145	197	54.3	-7.1	-39.5
547	Quinacridone gold				T	A	St	PR206 - PV19 - PY150	196	125	38	60.6	24.5	56.3	229	173	71	76.0	12.8	58.5
545	Quinacridone magenta				T	A	St	PR122	140	45	70	35.3	50.0	11.2	224	161	187	73.3	31.8	-2.6
548	Quinacridone red				T	A II		PR209	202	58	62	49.4	62.6	37.3	222	68	75	54.7	64.7	37.8
552	Raw sienna				T	AA I	G	PY42 - PR101	208	131	59	63.8	24.0	52.4	240	161	61	75.0	20.3	63.5
554	Raw umber				T	AA I	G	PBr7	144	92	53	45.4	18.2	32.9	234	188	127	80.6	9.4	38.1
576	Rose doré				T	A II	St	PV19 - PY97	228	84	79	58.1	61.5	38.1	232	133	129	67.8	42.4	22.1
603	Scarlet lake				ST	A II	St	PR188	200	50	35	48.2	64.6	49.5	234	85	71	59.2	62.2	44.5
637	Terre verte				ST	AA I	G	PG23 - PG18 - PB28	113	140	114	55.2	-14.9	8.7	173	193	167	75.8	-11.4	9.1
644	Titanium white				O	AA I		PW6	239	239	239	94.4	0.2	-0.1	240	238	233	94.0	0.3	2.3
0	Titanium white (gouache)				O	AA I		PW6	241	240	237	94.8	0.1	1.3	241	238	232	94.2	0.3	3.1
	Transparent orange				T	A I		PO107	195	56	43	47.8	61.5	44.1	250	157	108	75.3	32.0	43.6
653	Transparent yellow				T	A I	St	PY150	193	114	22	57.8	26.8	60.3	243	197	36	83.7	2.6	76.8
692	Viridian				T	AA I	G	PG18	0	113	78	39.3	-45.8	5.2	115	192	162	71.3	-31.2	4.5
707	Winsor blue (green shade)				T	A II	St	PB15	34	61	99	23.4	7.3	-29.4	70	173	202	63.5	-19.3	-28.8
719	Winsor green (blue shade)				T	A I	St	PG7	0	87	70	30.2	-28.6	-1.9	86	194	159	70.1	-40.1	3.3
721	Winsor green (yellow shade)				T	A I	St	PG36	0	90	58	31.9	-34.9	8.5	72	182	115	65.9	-49.8	20.5
722	Winsor lemon				ST	A	St	PY175	255	210	65	88.6	1.8	74.7	247	224	53	90.5	-8.8	76.3
733	Winsor violet (dioxazine)				T	A	St	PV23	64	52	57	23.2	6.5	-0.5	154	139	187	59.7	18.4	-23.3
730	Winsor yellow				ST	A I	St	PY154	255	197	0	86.9	9.4	98.4						

Number	Name	tube	full wash	thin wash	Opacity	Lightfastness	St/G	Pigments	R	G	B	L*	a*	b*	R	G	B	L*	a*	b*	
0	Titanium white (gouache)				O	AA I		PW6	241	240	237	94.8	0.1	1.3	241	238	232	94.2	0.3	3.1	
137	Cerulean blue				SO	AA I	G	PB35	0	134	174	47.0	-20.6	-38.2	109	188	206	70.0	-18.4	-20.4	
150	Chinese white				SO	AA I		PW4	239	233	220	92.5	0.5	6.9	237	233	223	92.4	0.0	5.4	
180	Cobalt blue deep				ST	AA	G	PB74	0	88	191	34.1	23.5	-66.4	178	199	221	78.3	-0.7	-15.2	
184	Cobalt green				SO	AA	G	PG50	0	139	115	50.1	-41.8	-0.3	130	203	174	75.5	-30.7	4.1	
217	Davy's grey				SO	AA I		PG17 - PBk6 - PW5 - PBk19 (ex G17 - PBk6 - PW4 - PBk19)	121	126	117	52.3	-4.4	4.9	218	213	195	85.5	-1.4	9.6	
263	French ultramarine				T	A I *	G	PB29	0	57	170	23.7	36.5	-71.1	177	202	222	78.9	-2.4	-14.5	
267	New gamboge				ST	A II		PY150 - PR209 (ex PY153)	255	151	0	75.1	31.0	85.6	250	212	110	88.1	1.2	55.3	
294	Green gold				T	A		PY129	129	100	43	45.5	3.9	37.5	239	211	112	86.5	-2.9	52.3	
319	Indian yellow				T	A II		PY139 - PO62 (ex PY153 - PO62)	255	140	0	73.9	39.4	82.8	255	175	0	81.0	20.9	85.7	
331	Ivory black				O	AA I	G	PBk9	57	57	57	23.7	0.3	0.0	181	172	159	71.0	1.2	8.0	
430	Neutral tint				O	A II	St	PB15 - PBk6 - PV19	60	57	59	24.3	1.5	-0.6	97	96	101	40.6	1.9	-2.9	
447	Olive green				T	A II	St	PY65 - PB15:6 - PR101 (ex PY42 - PG7)	66	72	46	29.6	-9.7	15.2	190	173	110	72.0	-4.6	36.0	
459	Oxide of chromium				O	AA I	GSt	PG17	78	99	76	39.6	-15.4	11.1	148	162	117	65.1	-15.5	22.8	
460	Perylene green				T	A	St	PBk31	57	54	54	22.6	2.4	0.5	152	163	148	65.8	-7.1	6.3	
465	Payne's grey				SO	A II	St	PB15 - PBk6 - PV19	57	54	58	22.7	3.0	-2.1	125	144	149	57.7	-4.9	-6.1	
466	Permanent alizarin crimson				T	A	St	PR206 - n/a	163	47	61	40.0	55.6	23.9	197	75	93	51.0	57.4	20.0	
470	Perylene violet				T	A	St	PV29	83	53	53	26.3	17.8	7.2	151	100	109	48.8	26.1	6.3	
502	Permanent rose				T	A II	St	PV19	170	47	60	41.6	57.3	27.2	238	136	163	69.7	46.4	7.0	
503	Permanent sap green				T	A I	St	PG36 - PY110	82	99	45	40.2	-22.7	28.9	137	155	73	62.1	-26.2	40.9	
507	Perylene maroon				T	A	St	PR179	101	51	49	28.8	28.1	13.5	170	81	79	47.3	43.0	22.5	
545	Quinacridone magenta				T	A	St	PR122	140	45	70	35.3	50.0	11.2	224	161	187	73.3	31.8	-2.6	
547	Quinacridone gold				T	A	St	PR206 - PV19 - PY150	196	125	38	60.6	24.5	56.3	229	173	71	76.0	12.8	58.5	
552	Raw sienna				T	AA I	G	PY42 - PR101	208	131	59	63.8	24.0	52.4	240	161	61	75.0	20.3	63.5	
554	Raw umber				T	AA I	G	PBr7	144	92	53	45.4	18.2	32.9	234	188	127	80.6	9.4	38.1	
603	Scarlet lake				ST	A II	St	PR188	200	50	35	48.2	64.6	49.5	234	85	71	59.2	62.2	44.5	
637	Terre verte				ST	AA I	G	PG23 - PG18 - PB28	113	140	114	55.2	-14.9	8.7	173	193	167	75.8	-11.4	9.1	
644	Titanium white				O	AA I		PW6	239	239	239	94.4	0.2	-0.1	240	238	233	94.0	0.3	2.3	
653	Transparent yellow				T	A I	St	PY150	193	114	22	57.8	26.8	60.3	243	197	36	83.7	2.6	76.8	
692	Viridian				T	AA I	G	PG18	0	113	78	39.3	-45.8	5.2	115	192	162	71.3	-31.2	4.5	
707	Winsor blue (green shade)				T	A II	St	PB15	34	61	99	23.4	7.3	-29.4	70	173	202	63.5	-19.3	-28.8	
719	Winsor green (blue shade)				T	A I	St	PG7	0	87	70	30.2	-28.6	-1.9	86	194	159	70.1	-40.1	3.3	
721	Winsor green (yellow shade)				T	A I	St	PG36	0	90	58	31.9	-34.9	8.5	72	182	115	65.9	-49.8	20.5	
730	Winsor yellow				ST	A I	St	PY154	255	197	0	86.9	9.4	98.4	255	212	0	88.7	-1.9	86.9	
733	Winsor violet (dioxazine)				T	A	St	PV23	64	52	57	23.2	6.5	-0.5	154	139	187	59.7	18.4	-23.3	
744	Yellow ochre				SO	AA I		PY43	199	122	50	60.5	24.5	52.9	240	166	79	76.1	18.8	57.2	
059	Brown ochre				ST	AA I	G	PBr7	196	105	57	56.5	35.0	45.8	227	148	88	70.2	26.2	45.9	
074	Burnt sienna				T	AA I		PR101	145	67	57	39.9	36.6	24.7	218	133	86	65.7	31.2	41.5	
076	Burnt umber				T	AA I		PBr7 - PR101 - PY42	70	56	53	24.9	6.8	4.8	186	125	77	59.2	20.6	37.3	
178	Cobalt blue				ST	AA I	G	PB28	0	114	192	41.0	5.6	-57.0	148	191	221	73.7	-4.5	-22.2	
322	Indigo				O	A II	St	PBk6 - PV19 - PB15	46	45	52	18.4	2.9	-4.7	67	101	119	39.6	-5.7	-16.2	
548	Quinacridone red				T	A II		PR209	202	58	62	49.4	62.6	37.3	222	68	75	54.7	64.7	37.8	
576	Rose doré				T	A II	St	PV19 - PY97	228	84	79	58.1	61.5	38.1	232	133	129	67.8	42.4	22.1	
722	Winsor lemon				ST	A	St	PY175	255	210	65	88.6	1.8	74.7	247	224	53	90.5	-8.8	76.3	
	Yellow titanate				O	AA I	GSt	PBr24	210	135	55	64.9	22.6	55.2	246	195	126	83.6	10.4	43.0	
	Transparent orange				T	A I		PO107	195	56	43	47.8	61.5	44.1	250	157	108	75.3	32.0	43.6	
	Dumont's blue (smalt)				ST	AA I	St	PV15	47	48	65	19.7	3.8	-11.1	145	170	230	67.8	7.5	-35.3	
	Phthalo sapphire				T	A I		PB15:6	44	54	96	21.8	11.8	-29.0	56	145	197	54.3	-7.1	-39.5	
	Gold brown				O	AA I	St	PBk12	163	106	62	51.5	19.4	35.5	232	183	137	79.3	12.3	32.1	
	Indian red deep				T	A I		PBr25	81	59	50	27.5	10.4	10.1	209	132	111	64.3	29.4	27.6	
	Dark brown				O	AA I	St	PY164	85	69	67	31.1	7.1	4.6	157	134	122	58.1	8.5	10.5	
						* = bleached by acids			(tube)						(wash)						
	Colours scanned and pasted in from patch samples. Colour values measured using ColorMunki®.																				
	Note that all colour values are approximate.																				
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Number	Name	tube	full wash	thin wash	Opacity	Lightfastness	St/G	Pigments	R	G	B	L*	a*	b*	R	G	B	L*	a*	b*
459	Yellow titanate				O	AA I	GSt	PBr24	210	135	55	64.9	22.6	55.2	246	195	126	83.6	10.4	43.0
	Oxide of chromium				O	AA I	GSt	PG17	78	99	76	39.6	-15.4	11.1	148	162	117	65.1	-15.5	22.8
	Gold brown				O	AA I	St	PBk12	163	106	62	51.5	19.4	35.5	232	183	137	79.3	12.3	32.1
322	Dark brown				O	AA I	St	PY164	85	69	67	31.1	7.1	4.6	157	134	122	58.1	8.5	10.5
	Indigo				O	A II	St	PBk6 - PV19 - PB15	46	45	52	18.4	2.9	-4.7	67	101	119	39.6	-5.7	-16.2
	Neutral tint				O	A II	St	PB15 - PBk6 - PV19	60	57	59	24.3	1.5	-0.6	97	96	101	40.6	1.9	-2.9
331	Ivory black				O	AA I	G	PBk9	57	57	57	23.7	0.3	0.0	181	172	159	71.0	1.2	8.0
644	Titanium white				O	AA I		PW6	239	239	239	94.4	0.2	-0.1	240	238	233	94.0	0.3	2.3
0	Titanium white (gouache)				O	AA I		PW6	241	240	237	94.8	0.1	1.3	241	238	232	94.2	0.3	3.1
137	Cerulean blue				SO	AA I	G	PB35	0	134	174	47.0	-20.6	-38.2	109	188	206	70.0	-18.4	-20.4
184	Cobalt green				SO	AA	G	PG50	0	139	115	50.1	-41.8	-0.3	130	203	174	75.5	-30.7	4.1
744	Yellow ochre				SO	AA I		PY43	199	122	50	60.5	24.5	52.9	240	166	79	76.1	18.8	57.2
465	Payne's grey				SO	A II	St	PB15 - PBk6 - PV19	57	54	58	22.7	3.0	-2.1	125	144	149	57.7	-4.9	-6.1
217	Davy's grey				SO	AA I		PG17 - PBk6 - PW5 - PBk19 (ex G17 - PBk6 - PW4 - PBk19)	121	126	117	52.3	-4.4	4.9	218	213	195	85.5	-1.4	9.6
150	Chinese white				SO	AA I		PW4	239	233	220	92.5	0.5	6.9	237	233	223	92.4	0.0	5.4
722	Winsor lemon				ST	A	St	PY175	255	210	65	88.6	1.8	74.7	247	224	53	90.5	-8.8	76.3
730	Winsor yellow				ST	A I	St	PY154	255	197	0	86.9	9.4	98.4	255	212	0	88.7	-1.9	86.9
267	New gamboge				ST	A II		PY150 - PR209 (ex PY153)	255	151	0	75.1	31.0	85.6	250	212	110	88.1	1.2	55.3
603	Scarlet lake				ST	A II	St	PR188	200	50	35	48.2	64.6	49.5	234	85	71	59.2	62.2	44.5
	Dumont's blue (smalt)				ST	AA I	St	PV15	47	48	65	19.7	3.8	-11.1	145	170	230	67.8	7.5	-35.3
180	Cobalt blue deep				ST	AA	G	PB74	0	88	191	34.1	23.5	-66.4	178	199	221	78.3	-0.7	-15.2
178	Cobalt blue				ST	AA I	G	PB28	0	114	192	41.0	5.6	-57.0	148	191	221	73.7	-4.5	-22.2
637	Terre verte				ST	AA I	G	PG23 - PG18 - PB28	113	140	114	55.2	-14.9	8.7	173	193	167	75.8	-11.4	9.1
059	Brown ochre				ST	AA I	G	PBr7	196	105	57	56.5	35.0	45.8	227	148	88	70.2	26.2	45.9
653	Transparent yellow				T	A I	St	PY150	193	114	22	57.8	26.8	60.3	243	197	36	83.7	2.6	76.8
319	Indian yellow				T	A II		PY139 - PO62 (ex PY153 - PO62)	255	140	0	73.9	39.4	82.8	255	175	0	81.0	20.9	85.7
	Transparent orange				T	A I		PO107	195	56	43	47.8	61.5	44.1	250	157	108	75.3	32.0	43.6
576	Rose doré				T	A II	St	PV19 - PY97	228	84	79	58.1	61.5	38.1	232	133	129	67.8	42.4	22.1
548	Quinacridone red				T	A II		PR209	202	58	62	49.4	62.6	37.3	222	68	75	54.7	64.7	37.8
466	Permanent alizarin crimson				T	A	St	PR206 - n/a	163	47	61	40.0	55.6	23.9	197	75	93	51.0	57.4	20.0
502	Permanent rose				T	A II	St	PV19	170	47	60	41.6	57.3	27.2	238	136	163	69.7	46.4	7.0
545	Quinacridone magenta				T	A	St	PR122	140	45	70	35.3	50.0	11.2	224	161	187	73.3	31.8	-2.6
733	Winsor violet (dioxazine)				T	A	St	PV23	64	52	57	23.2	6.5	-0.5	154	139	187	59.7	18.4	-23.3
263	French ultramarine				T	A I *	G	PB29	0	57	170	23.7	36.5	-71.1	177	202	222	78.9	-2.4	-14.5
	Phthalo sapphire				T	A I		PB15:6	44	54	96	21.8	11.8	-29.0	56	145	197	54.3	-7.1	-39.5
707	Winsor blue (green shade)				T	A II	St	PB15	34	61	99	23.4	7.3	-29.4	70	173	202	63.5	-19.3	-28.8
719	Winsor green (blue shade)				T	A I	St	PG7	0	87	70	30.2	-28.6	-1.9	86	194	159	70.1	-40.1	3.3
692	Viridian				T	AA I	G	PG18	0	113	78	39.3	-45.8	5.2	115	192	162	71.3	-31.2	4.5
721	Winsor green (yellow shade)				T	A I	St	PG36	0	90	58	31.9	-34.9	8.5	72	182	115	65.9	-49.8	20.5
460	Perylene green				T	A	St	PBk31	57	54	54	22.6	2.4	0.5	152	163	148	65.8	-7.1	6.3
503	Permanent sap green				T	A I	St	PG36 - PY110	82	99	45	40.2	-22.7	28.9	137	155	73	62.1	-26.2	40.9
447	Olive green				T	A II	St	PY65 - PB15:6 - PR101 (ex PY42 - PG7)	66	72	46	29.6	-9.7	15.2	190	173	110	72.0	-4.6	36.0
294	Green gold				T	A		PY129	129	100	43	45.5	3.9	37.5	239	211	112	86.5	-2.9	52.3
552	Raw sienna				T	AA I	G	PY42 - PR101	208	131	59	63.8	24.0	52.4	240	161	61	75.0	20.3	63.5
547	Quinacridone gold				T	A	St	PR206 - PV19 - PY150	196	125	38	60.6	24.5	56.3	229	173	71	76.0	12.8	58.5
074	Burnt sienna				T	AA I		PR101	145	67	57	39.9	36.6	24.7	218	133	86	65.7	31.2	41.5
507	Perylene maroon				T	A	St	PR179	101	51	49	28.8	28.1	13.5	170	81	79	47.3	43.0	22.5
470	Perylene violet				T	A	St	PV29	83	53	53	26.3	17.8	7.2	151	100	109	48.8	26.1	6.3
	Indian red deep																			

Number	Name	tube	full wash	thin wash	Opacity	Lightfastness	St/G	Pigments	R	G	B	L*	a*	b*	R	G	B	L*	a*	b*
322	Indigo				O	A II	St	PBk6 - PV19 - PB15	46	45	52	18.4	2.9	-4.7	67	101	119	39.6	-5.7	-16.2
	Dumont's blue (smalt)				ST	AA I	St	PV15	47	48	65	19.7	3.8	-11.1	145	170	230	67.8	7.5	-35.3
	Phthalo sapphire				T	A I		PB15:6	44	54	96	21.8	11.8	-29.0	56	145	197	54.3	-7.1	-39.5
460	Perylene green				T	A	St	PBk31	57	54	54	22.6	2.4	0.5	152	163	148	65.8	-7.1	6.3
465	Payne's grey				SO	A II	St	PB15 - PBk6 - PV19	57	54	58	22.7	3.0	-2.1	125	144	149	57.7	-4.9	-6.1
733	Winsor violet (dioxazine)				T	A	St	PV23	64	52	57	23.2	6.5	-0.5	154	139	187	59.7	18.4	-23.3
707	Winsor blue (green shade)				T	A II	St	PB15	34	61	99	23.4	7.3	-29.4	70	173	202	63.5	-19.3	-28.8
263	French ultramarine				T	A I *	G	PB29	0	57	170	23.7	36.5	-71.1	177	202	222	78.9	-2.4	-14.5
331	Ivory black				O	AA I	G	PBk9	57	57	57	23.7	0.3	0.0	181	172	159	71.0	1.2	8.0
430	Neutral tint				O	A II	St	PB15 - PBk6 - PV19	60	57	59	24.3	1.5	-0.6	97	96	101	40.6	1.9	-2.9
076	Burnt umber				T	AA I		PBr7 - PR101 - PY42	70	56	53	24.9	6.8	4.8	186	125	77	59.2	20.6	37.3
470	Perylene violet				T	A	St	PV29	83	53	53	26.3	17.8	7.2	151	100	109	48.8	26.1	6.3
	Indian red deep				T	A I		PBr25	81	59	50	27.5	10.4	10.1	209	132	111	64.3	29.4	27.6
507	Perylene maroon				T	A	St	PR179	101	51	49	28.8	28.1	13.5	170	81	79	47.3	43.0	22.5
447	Olive green				T	A II	St	PY65 - PB15:6 - PR101 (ex PY42 - PG7)	66	72	46	29.6	-9.7	15.2	190	173	110	72.0	-4.6	36.0
719	Winsor green (blue shade)				T	A I	St	PG7	0	87	70	30.2	-28.6	-1.9	86	194	159	70.1	-40.1	3.3
	Dark brown				O	AA I	St	PY164	85	69	67	31.1	7.1	4.6	157	134	122	58.1	8.5	10.5
721	Winsor green (yellow shade)				T	A I	St	PG36	0	90	58	31.9	-34.9	8.5	72	182	115	65.9	-49.8	20.5
180	Cobalt blue deep				ST	AA	G	PB74	0	88	191	34.1	23.5	-66.4	178	199	221	78.3	-0.7	-15.2
545	Quinacridone magenta				T	A	St	PR122	140	45	70	35.3	50.0	11.2	224	161	187	73.3	31.8	-2.6
692	Viridian				T	AA I	G	PG18	0	113	78	39.3	-45.8	5.2	115	192	162	71.3	-31.2	4.5
459	Oxide of chromium				O	AA I	GSt	PG17	78	99	76	39.6	-15.4	11.1	148	162	117	65.1	-15.5	22.8
074	Burnt sienna				T	AA I		PR101	145	67	57	39.9	36.6	24.7	218	133	86	65.7	31.2	41.5
466	Permanent alizarin crimson				T	A	St	PR206 - n/a	163	47	61	40.0	55.6	23.9	197	75	93	51.0	57.4	20.0
503	Permanent sap green				T	A I	St	PG36 - PY110	82	99	45	40.2	-22.7	28.9	137	155	73	62.1	-26.2	40.9
178	Cobalt blue				ST	AA I	G	PB28	0	114	192	41.0	5.6	-57.0	148	191	221	73.7	-4.5	-22.2
502	Permanent rose				T	A II	St	PV19	170	47	60	41.6	57.3	27.2	238	136	163	69.7	46.4	7.0
554	Raw umber				T	AA I	G	PBr7	144	92	53	45.4	18.2	32.9	234	188	127	80.6	9.4	38.1
294	Green gold				T	A		PY129	129	100	43	45.5	3.9	37.5	239	211	112	86.5	-2.9	52.3
137	Cerulean blue				SO	AA I	G	PB35	0	134	174	47.0	-20.6	-38.2	109	188	206	70.0	-18.4	-20.4
	Transparent orange				T	A I		PO107	195	56	43	47.8	61.5	44.1	250	157	108	75.3	32.0	43.6
603	Scarlet lake				ST	A II	St	PR188	200	50	35	48.2	64.6	49.5	234	85	71	59.2	62.2	44.5
548	Quinacridone red				T	A II		PR209	202	58	62	49.4	62.6	37.3	222	68	75	54.7	64.7	37.8
184	Cobalt green				SO	AA	G	PG50	0	139	115	50.1	-41.8	-0.3	130	203	174	75.5	-30.7	4.1
	Gold brown				O	AA I	St	PBk12	163	106	62	51.5	19.4	35.5	232	183	137	79.3	12.3	32.1
217	Davy's grey				SO	AA I		PG17 - PBk6 - PW5 - PBk19 (ex G17 - PBk6 - PW4 - PBk19)	121	126	117	52.3	-4.4	4.9	218	213	195	85.5	-1.4	9.6
637	Terre verte				ST	AA I	G	PG23 - PG18 - PB28	113	140	114	55.2	-14.9	8.7	173	193	167	75.8	-11.4	9.1
059	Brown ochre				ST	AA I	G	PBr7	196	105	57	56.5	35.0	45.8	227	148	88	70.2	26.2	45.9
653	Transparent yellow				T	A I	St	PY150	193	114	22	57.8	26.8	60.3	243	197	36	83.7	2.6	76.8
576	Rose doré				T	A II	St	PV19 - PY97	228	84	79	58.1	61.5	38.1	232	133	129	67.8	42.4	22.1
744	Yellow ochre				SO	AA I		PY43	199	122	50	60.5	24.5	52.9	240	166	79	76.1	18.8	57.2
547	Quinacridone gold				T	A	St	PR206 - PV19 - PY150	196	125	38	60.6	24.5	56.3	229	173	71	76.0	12.8	58.5
552	Raw sienna				T	AA I	G	PY42 - PR101	208	131	59	63.8	24.0	52.4	240	161	61	75.0	20.3	63.5
	Yellow titanate				O	AA I	GSt	PBr24	210	135	55	64.9	22.6	55.2	246	195	126	83.6	10.4	43.0
319	Indian yellow				T	A II		PY139 - PO62 (ex PY153 - PO62)	255	140	0	73.9	39.4	82.8	255	175	0	81.0	20.9	85.7
267	New gamboge				ST	A II		PY150 - PR209 (ex PY153)	255	151	0	75.1	31.0	85.6	250	212	110	88.1	1.2	55.3
730	Winsor yellow				ST	A I	St	PY154	255	197	0	86.9	9.4	98.4	255	212	0	88.7	-1.9	86.9
722	Winsor lemon				ST	A	St	PY175	255	210	65	88.6	1.8	74.7	247	224	53	90.5	-8.8	76.3
150	Chinese white																			