











































Number	Name	colour	Opacity	Lightfastness	Pigments	R	G	B	L	a	b	H	V	C
722	Winsor lemon		T	A	PY3	245	213	0	87.4	-6.5	97.9	5.2Y	8.6	11.3
086	Cadmium lemon		O	A	PY35	255	216	0	89.4	-5.0	101	5.2Y	8.8	13.7
730	Winsor yellow		T	A	PY74	255	193	0	84.8	6.6	110	2.9Y	8.3	11.8
113	Cadmium yellow light		O	A	PY35	255	190	0	84.6	9.3	112	2.0Y	8.3	14.0
116	Cadmium yellow medium		O	A	PY35	255	164	0	79.3	27.6	93.0	7.5YR	7.8	15.0
111	Cadmium yellow deep		O	A	PY35 - PO20	255	144	0	75.1	38.2	84.9	4.6YR	7.4	15.4
089	Cadmium orange		O	A	PR108 - PO20	254	97	0	64.8	58.2	96.4	0.4YR	6.2	16.3
257	Flesh tint		O	A	PY42 - PW6 - PV19	219	129	122	64.9	38.2	21.3	5.7R	6.3	9.3
100	Cadmium red light		O	A	PR108	222	52	0	52.7	68.8	68.0	8.9R	5.1	17.7
099	Cadmium red medium		O	A	PR108	201	23	8	46.1	71.5	59.2	8.4R	4.6	17.6
726	Winsor red		T	A	PR188 - PR170	213	44	32	50.1	69.8	54.1	7.7R	4.9	17.3
097	Cadmium red deep		O	A	PR108	141	37	45	34.3	52.0	25.3	6.0R	3.4	10.9
501	Permanent rose		T	A	PV19	165	35	54	39.1	59.5	27.9	4.9R	3.8	13.3
468	Permanent alizarin crimson		T	A	PR177	96	0	13	19.2	49.8	25.3	0.1YR	2.1	9.9
380	Magenta		T	A	PR122 - PB15	114	6	52	25.1	50.5	9.1	2.3R	2.6	9.3
229	Dioxazine purple		T	A	PV23	39	35	49	14.2	6.5	-8.2	1.0P	1.3	1.6
263	French ultramarine		T	A	PB29	0	55	180	19.7	44.5	-84.2	7.3PB	2.5	19.5
178	Cobalt blue		T	A	PB28	33	68	125	26.3	12.3	-40.2	5.9PB	2.6	9.0
538	Prussian blue		T	A	PB27	25	28	35	9.8	0.7	-5.6	4.8PB	0.9	1.0
514	Phthalo blue		T	A	PB15	0	39	80	12.2	11.1	-35.1	6.2PB	1.2	7.9
137	Cerulean blue		O	AA	PB35	0	105	150	37.0	-14.1	-39.5	0.1PB	3.6	9.8
522	Phthalo green		T	A	PG7	0	85	53	26.2	-55.3	0.2	8.0G	2.8	5.5
692	Viridian		T	AA	PG18	0	71	41	22.4	-47.7	4.6	4.7G	2.4	6.0
521	Phthalo green (yellow shade)		T	A	PG36	12	55	44	19.0	-16.5	0.0	1.1BG	1.8	3.7
637	Terre verte		O	AA	PG7 - PG23	91	147	108	56.0	-30.7	12.7	3.7G	5.4	5.8
459	Oxide of chromium		O	AA	PG17	66	97	52	38.1	-24.7	23.1	9.0GY	3.7	5.4
503	Permanent sap green		T	A	PG7 - PY129	34	41	24	15.8	-9.1	10.8	6.7GY	1.5	2.7
447	Olive green		T	B	PY129 - PBk7	37	41	30	15.8	-4.1	6.2	4.6GY	1.5	1.6
422	Naples yellow hue		O	A	PW6 - PR101 - PY42	224	171	114	75.3	12.1	38.6	7.9YR	7.4	6.1
744	Yellow ochre		O	AA	PY43	189	118	53	58.2	21.7	49.0	6.5YR	5.7	8.6
552	Raw sienna		T	AA	PY43	212	125	0	63.1	26.3	72.6	6.1YR	6.1	11.9
074	Burnt sienna		T	AA	PR101	99	58	47	30.0	19.2	16.3	1.3YR	2.9	4.4
362	Light red		O	AA	PR101	142	56	33	37.3	37.9	35.3	10R	3.6	9.4
317	Indian red		O	AA	PR101	123	60	55	34.6	29.7	18.3	7.8R	3.4	6.4
076	Burnt umber		T	AA	PBr7	65	48	43	21.9	8.3	7.0	2.8YR	2.1	1.9
554	Raw umber		T	AA	PBr7 - PBk11	69	50	36	23.0	7.7	13.1	7.3YR	2.2	2.6
217	Davy's grey		T	A	PPBk19 - PY42 - PBk7	62	61	55	25.7	-0.8	4.2	8.0Y	2.5	0.6
465	Payne's grey		O	A	PB29	12	28	43	8.4	0.3	-13.9	3.8PB	0.8	2.4
331	Ivory black		O	AA	PBk9	44	45	47	18.3	-0.1	-1.1	2.7PB	1.8	0.2
337	Lamp black		O	AA	PBk6	27	27	27	9.6	0.3	-0.2	N	0.9	0.0
415	Mixing white		O	AA	PW6	243	235	222	93.6	0.7	7.2	0.2Y	9.3	1.0
644	Titanium white		O	AA	PW6	239	238	232	94.0	-0.4	2.8	5.0Y	9.3	0.4

Colours scanned and pasted in from patch samples. Colour values measured using ColorMunki® and converted to Munsell using BabelColor CT&A.

Note that all colour values are approximate, and conversions are even more approximate, particularly to the Munsell System.











































Number	Name	colour	Opacity	Lightfastness	Pigments	R	G	B	L	a	b	H	V	C
074	Burnt sienna		T	AA	PR101	99	58	47	30.0	19.2	16.3	1.3YR	2.9	4.4
076	Burnt umber		T	AA	PBr7	65	48	43	21.9	8.3	7.0	2.8YR	2.1	1.9
086	Cadmium lemon		O	A	PY35	255	216	0	89.4	-5.0	101	5.2Y	8.8	13.7
089	Cadmium orange		O	A	PR108 - PO20	254	97	0	64.8	58.2	96.4	0.4YR	6.2	16.3
097	Cadmium red deep		O	A	PR108	141	37	45	34.3	52.0	25.3	6.0R	3.4	10.9
099	Cadmium red medium		O	A	PR108	201	23	8	46.1	71.5	59.2	8.4R	4.6	17.6
100	Cadmium red light		O	A	PR108	222	52	0	52.7	68.8	68.0	8.9R	5.1	17.7
111	Cadmium yellow deep		O	A	PY35 - PO20	255	144	0	75.1	38.2	84.9	4.6YR	7.4	15.4
113	Cadmium yellow light		O	A	PY35	255	190	0	84.6	9.3	112	2.0Y	8.3	14.0
116	Cadmium yellow medium		O	A	PY35	255	164	0	79.3	27.6	93.0	7.5YR	7.8	15.0
137	Cerulean blue		O	AA	PB35	0	105	150	37.0	-14.1	-39.5	0.1PB	3.6	9.8
178	Cobalt blue		T	A	PB28	33	68	125	26.3	12.3	-40.2	5.9PB	2.6	9.0
217	Davy's grey		T	A	PPBk19 - PY42 - PBk7	62	61	55	25.7	-0.8	4.2	8.0Y	2.5	0.6
229	Dioxazine purple		T	A	PV23	39	35	49	14.2	6.5	-8.2	1.0P	1.3	1.6
257	Flesh tint		O	A	PY42 - PW6 - PV19	219	129	122	64.9	38.2	21.3	5.7R	6.3	9.3
263	French ultramarine		T	A	PB29	0	55	180	19.7	44.5	-84.2	7.3PB	2.5	19.5
317	Indian red		O	AA	PR101	123	60	55	34.6	29.7	18.3	7.8R	3.4	6.4
331	Ivory black		O	AA	PBk9	44	45	47	18.3	-0.1	-1.1	2.7PB	1.8	0.2
337	Lamp black		O	AA	PBk6	27	27	27	9.6	0.3	-0.2	N	0.9	0.0
362	Light red		O	AA	PR101	142	56	33	37.3	37.9	35.3	10R	3.6	9.4
380	Magenta		T	A	PR122 - PB15	114	6	52	25.1	50.5	9.1	2.3R	2.6	9.3
415	Mixing white		O	AA	PW6	243	235	222	93.6	0.7	7.2	0.2Y	9.3	1.0
422	Naples yellow hue		O	A	PW6 - PR101 - PY42	224	171	114	75.3	12.1	38.6	7.9YR	7.4	6.1
447	Olive green		T	B	PY129 - PBk7	37	41	30	15.8	-4.1	6.2	4.6GY	1.5	1.6
459	Oxide of chromium		O	AA	PG17	66	97	52	38.1	-24.7	23.1	9.0GY	3.7	5.4
465	Payne's grey		O	A	PB29	12	28	43	8.4	0.3	-13.9	3.8PB	0.8	2.4
468	Permanent alizarin crimson		T	A	PR177	96	0	13	19.2	49.8	25.3	0.1YR	2.1	9.9
501	Permanent rose		T	A	PV19	165	35	54	39.1	59.5	27.9	4.9R	3.8	13.3
503	Permanent sap green		T	A	PG7 - PY129	34	41	24	15.8	-9.1	10.8	6.7GY	1.5	2.7
514	Phthalo blue		T	A	PB15	0	39	80	12.2	11.1	-35.1	6.2PB	1.2	7.9
521	Phthalo green (yellow shade)		T	A	PG36	12	55	44	19.0	-16.5	0.0	1.1BG	1.8	3.7
522	Phthalo green		T	A	PG7	0	85	53	26.2	-55.3	0.2	8.0G	2.8	5.5
538	Prussian blue		T	A	PB27	25	28	35	9.8	0.7	-5.6	4.8PB	0.9	1.0
552	Raw sienna		T	AA	PY43	212	125	0	63.1	26.3	72.6	6.1YR	6.1	11.9
554	Raw umber		T	AA	PBr7 - PBk11	69	50	36	23.0	7.7	13.1	7.3YR	2.2	2.6
637	Terre verte		O	AA	PG7 - PG23	91	147	108	56.0	-30.7	12.7	3.7G	5.4	5.8
644	Titanium white		O	AA	PW6	239	238	232	94.0	-0.4	2.8	5.0Y	9.3	0.4
692	Viridian		T	AA	PG18	0	71	41	22.4	-47.7	4.6	4.7G	2.4	6.0
722	Winsor lemon		T	A	PY3	245	213	0	87.4	-6.5	97.9	5.2Y	8.6	11.3
726	Winsor red		T	A	PR188 - PR170	213	44	32	50.1	69.8	54.1	7.7R	4.9	17.3
730	Winsor yellow		T	A	PY74	255	193	0	84.8	6.6	110	2.9Y	8.3	11.8
744	Yellow ochre		O	AA	PY43	189	118	53	58.2	21.7	49.0	6.5YR	5.7	8.6

© 2009 EHN & DIJ Oakley

All commercial rights reserved: contact [h.oakley@btconnect.com](mailto:h.oakley@btconnect.com) for permission to use in any commercial situation.











































Colours scanned and pasted in from patch samples. Colour values measured using ColorMunki® and converted to Munsell using BabelColor CT&A.

Note that all colour values are approximate, and conversions are even more approximate, particularly to the Munsell System.

Number	Name	colour	Opacity	Lightfastness	Pigments	R	G	B	L	a	b	H	V	C
086	Cadmium lemon		O	A	PY35	255	216	0	89.4	-5.0	101	5.2Y	8.8	13.7
113	Cadmium yellow light		O	A	PY35	255	190	0	84.6	9.3	112	2.0Y	8.3	14.0
116	Cadmium yellow medium		O	A	PY35	255	164	0	79.3	27.6	93.0	7.5YR	7.8	15.0
111	Cadmium yellow deep		O	A	PY35 - PO20	255	144	0	75.1	38.2	84.9	4.6YR	7.4	15.4
089	Cadmium orange		O	A	PR108 - PO20	254	97	0	64.8	58.2	96.4	0.4YR	6.2	16.3
257	Flesh tint		O	A	PY42 - PW6 - PV19	219	129	122	64.9	38.2	21.3	5.7R	6.3	9.3
100	Cadmium red light		O	A	PR108	222	52	0	52.7	68.8	68.0	8.9R	5.1	17.7
099	Cadmium red medium		O	A	PR108	201	23	8	46.1	71.5	59.2	8.4R	4.6	17.6
097	Cadmium red deep		O	A	PR108	141	37	45	34.3	52.0	25.3	6.0R	3.4	10.9
137	Cerulean blue		O	AA	PB35	0	105	150	37.0	-14.1	-39.5	0.1PB	3.6	9.8
637	Terre verte		O	AA	PG7 - PG23	91	147	108	56.0	-30.7	12.7	3.7G	5.4	5.8
459	Oxide of chromium		O	AA	PG17	66	97	52	38.1	-24.7	23.1	9.0GY	3.7	5.4
422	Naples yellow hue		O	A	PW6 - PR101 - PY42	224	171	114	75.3	12.1	38.6	7.9YR	7.4	6.1
744	Yellow ochre		O	AA	PY43	189	118	53	58.2	21.7	49.0	6.5YR	5.7	8.6
362	Light red		O	AA	PR101	142	56	33	37.3	37.9	35.3	10R	3.6	9.4
317	Indian red		O	AA	PR101	123	60	55	34.6	29.7	18.3	7.8R	3.4	6.4
465	Payne's grey		O	A	PB29	12	28	43	8.4	0.3	-13.9	3.8PB	0.8	2.4
331	Ivory black		O	AA	PBk9	44	45	47	18.3	-0.1	-1.1	2.7PB	1.8	0.2
337	Lamp black		O	AA	PBk6	27	27	27	9.6	0.3	-0.2	N	0.9	0.0
415	Mixing white		O	AA	PW6	243	235	222	93.6	0.7	7.2	0.2Y	9.3	1.0
644	Titanium white		O	AA	PW6	239	238	232	94.0	-0.4	2.8	5.0Y	9.3	0.4
722	Winsor lemon		T	A	PY3	245	213	0	87.4	-6.5	97.9	5.2Y	8.6	11.3
730	Winsor yellow		T	A	PY74	255	193	0	84.8	6.6	110	2.9Y	8.3	11.8
726	Winsor red		T	A	PR188 - PR170	213	44	32	50.1	69.8	54.1	7.7R	4.9	17.3
501	Permanent rose		T	A	PV19	165	35	54	39.1	59.5	27.9	4.9R	3.8	13.3
468	Permanent alizarin crimson		T	A	PR177	96	0	13	19.2	49.8	25.3	0.1YR	2.1	9.9
380	Magenta		T	A	PR122 - PB15	114	6	52	25.1	50.5	9.1	2.3R	2.6	9.3
229	Dioxazine purple		T	A	PV23	39	35	49	14.2	6.5	-8.2	1.0P	1.3	1.6
263	French ultramarine		T	A	PB29	0	55	180	19.7	44.5	-84.2	7.3PB	2.5	19.5
178	Cobalt blue		T	A	PB28	33	68	125	26.3	12.3	-40.2	5.9PB	2.6	9.0
538	Prussian blue		T	A	PB27	25	28	35	9.8	0.7	-5.6	4.8PB	0.9	1.0
514	Phthalo blue		T	A	PB15	0	39	80	12.2	11.1	-35.1	6.2PB	1.2	7.9
522	Phthalo green		T	A	PG7	0	85	53	26.2	-55.3	0.2	8.0G	2.8	5.5
692	Viridian		T	AA	PG18	0	71	41	22.4	-47.7	4.6	4.7G	2.4	6.0
521	Phthalo green (yellow shade)		T	A	PG36	12	55	44	19.0	-16.5	0.0	1.1BG	1.8	3.7
503	Permanent sap green		T	A	PG7 - PY129	34	41	24	15.8	-9.1	10.8	6.7GY	1.5	2.7
447	Olive green		T	B	PY129 - PBk7	37	41	30	15.8	-4.1	6.2	4.6GY	1.5	1.6
552	Raw sienna		T	AA	PY43	212	125	0	63.1	26.3	72.6	6.1YR	6.1	11.9
074	Burnt sienna		T	AA	PR101	99	58	47	30.0	19.2	16.3	1.3YR	2.9	4.4
076	Burnt umber		T	AA	PBr7	65	48	43	21.9	8.3	7.0	2.8YR	2.1	1.9
554	Raw umber		T	AA	PBr7 - PBk11	69	50	36	23.0	7.7	13.1	7.3YR	2.2	2.6
217	Davy's grey		T	A	PPBk19 - PY42 - PBk7	62	61	55	25.7	-0.8	4.2	8.0Y	2.5	0.6

Colours scanned and pasted in from patch samples. Colour values measured using ColorMunki® and converted to Munsell using BabelColor CT&A.

Note that all colour values are approximate, and conversions are even more approximate, particularly to the Munsell System.

Number	Name	colour	Opacity	Lightfastness	Pigments	R	G	B	L	a	b	H	V	C
074	Burnt sienna		T	AA	PR101	99	58	47	30.0	19.2	16.3	1.3YR	2.9	4.4
076	Burnt umber		T	AA	PBr7	65	48	43	21.9	8.3	7.0	2.8YR	2.1	1.9
086	Cadmium lemon		O	A	PY35	255	216	0	89.4	-5.0	101	5.2Y	8.8	13.7
089	Cadmium orange		O	A	PR108 - PO20	254	97	0	64.8	58.2	96.4	0.4YR	6.2	16.3
097	Cadmium red deep		O	A	PR108	141	37	45	34.3	52.0	25.3	6.0R	3.4	10.9
100	Cadmium red light		O	A	PR108	222	52	0	52.7	68.8	68.0	8.9R	5.1	17.7
099	Cadmium red medium		O	A	PR108	201	23	8	46.1	71.5	59.2	8.4R	4.6	17.6
111	Cadmium yellow deep		O	A	PY35 - PO20	255	144	0	75.1	38.2	84.9	4.6YR	7.4	15.4
113	Cadmium yellow light		O	A	PY35	255	190	0	84.6	9.3	112	2.0Y	8.3	14.0
116	Cadmium yellow medium		O	A	PY35	255	164	0	79.3	27.6	93.0	7.5YR	7.8	15.0
137	Cerulean blue		O	AA	PB35	0	105	150	37.0	-14.1	-39.5	0.1PB	3.6	9.8
178	Cobalt blue		T	A	PB28	33	68	125	26.3	12.3	-40.2	5.9PB	2.6	9.0
217	Davy's grey		T	A	PPBk19 - PY42 - PBk7	62	61	55	25.7	-0.8	4.2	8.0Y	2.5	0.6
229	Dioxazine purple		T	A	PV23	39	35	49	14.2	6.5	-8.2	1.0P	1.3	1.6
257	Flesh tint		O	A	PY42 - PW6 - PV19	219	129	122	64.9	38.2	21.3	5.7R	6.3	9.3
263	French ultramarine		T	A	PB29	0	55	180	19.7	44.5	-84.2	7.3PB	2.5	19.5
317	Indian red		O	AA	PR101	123	60	55	34.6	29.7	18.3	7.8R	3.4	6.4
331	Ivory black		O	AA	PBk9	44	45	47	18.3	-0.1	-1.1	2.7PB	1.8	0.2
337	Lamp black		O	AA	PBk6	27	27	27	9.6	0.3	-0.2	N	0.9	0.0
362	Light red		O	AA	PR101	142	56	33	37.3	37.9	35.3	10R	3.6	9.4
380	Magenta		T	A	PR122 - PB15	114	6	52	25.1	50.5	9.1	2.3R	2.6	9.3
415	Mixing white		O	AA	PW6	243	235	222	93.6	0.7	7.2	0.2Y	9.3	1.0
422	Naples yellow hue		O	A	PW6 - PR101 - PY42	224	171	114	75.3	12.1	38.6	7.9YR	7.4	6.1
447	Olive green		T	B	PY129 - PBk7	37	41	30	15.8	-4.1	6.2	4.6GY	1.5	1.6
459	Oxide of chromium		O	AA	PG17	66	97	52	38.1	-24.7	23.1	9.0GY	3.7	5.4
465	Payne's grey		O	A	PB29	12	28	43	8.4	0.3	-13.9	3.8PB	0.8	2.4
468	Permanent alizarin crimson		T	A	PR177	96	0	13	19.2	49.8	25.3	0.1YR	2.1	9.9
501	Permanent rose		T	A	PV19	165	35	54	39.1	59.5	27.9	4.9R	3.8	13.3
503	Permanent sap green		T	A	PG7 - PY129	34	41	24	15.8	-9.1	10.8	6.7GY	1.5	2.7
514	Phthalo blue		T	A	PB15	0	39	80	12.2	11.1	-35.1	6.2PB	1.2	7.9
522	Phthalo green		T	A	PG7	0	85	53	26.2	-55.3	0.2	8.0G	2.8	5.5
521	Phthalo green (yellow shade)		T	A	PG36	12	55	44	19.0	-16.5	0.0	1.1BG	1.8	3.7
538	Prussian blue		T	A	PB27	25	28	35	9.8	0.7	-5.6	4.8PB	0.9	1.0
552	Raw sienna		T	AA	PY43	212	125	0	63.1	26.3	72.6	6.1YR	6.1	11.9
554	Raw umber		T	AA	PBr7 - PBk11	69	50	36	23.0	7.7	13.1	7.3YR	2.2	2.6
637	Terre verte		O	AA	PG7 - PG23	91	147	108	56.0	-30.7	12.7	3.7G	5.4	5.8
644	Titanium white		O	AA	PW6	239	238	232	94.0	-0.4	2.8	5.0Y	9.3	0.4
692	Viridian		T	AA	PG18	0	71	41	22.4	-47.7	4.6	4.7G	2.4	6.0
722	Winsor lemon		T	A	PY3	245	213	0	87.4	-6.5	97.9	5.2Y	8.6	11.3
726	Winsor red		T	A	PR188 - PR170	213	44	32	50.1	69.8	54.1	7.7R	4.9	17.3
730	Winsor yellow		T	A	PY74	255	193	0	84.8	6.6	110	2.9Y	8.3	11.8
744	Yellow ochre		O	AA	PY43	189	118	53	58.2	21.7	49.0	6.5YR	5.7	8.6

Colours scanned and pasted in from patch samples. Colour values measured using ColorMunki® and converted to Munsell using BabelColor CT&A.

Note that all colour values are approximate, and conversions are even more approximate, particularly to the Munsell System.