

Munsell and Lab Readings for Williamsburg Handmade Oil Colors

6 mil (~ thickness of 2 sheets of paper)

Alphabetical	Munsell			CIE LAB		
Name	Hue	Value	Chroma	L*	a*	b*
Alizarin Crimson	1.42YR	1.12	6.15	11.18	26.23	13.24
Alizarin Orange	0.44YR	4.46	15.03	44.36	51.27	64.84
Alizarin Yellow	7.35YR	5.82	14.68	57.45	32.42	86.68
Bismuth Vanadate Yellow	6.9Y	9.10	13.50	90.14	-2.02	99.47
Bohemian Green Earth	6.48Y	2.95	2.62	29.78	0.92	16.29
Brilliant Yellow Extra Pale	7.73Y	9.57	1.30	96.32	-1.25	11.25
Brilliant Yellow Pale	6.69Y	9.50	4.38	94.92	-1.33	33.41
Brown Ochre	9.7YR	3.82	3.89	38.43	9.86	23.34
Brown Pink	2.23YR	2.08	2.59	21.10	11.34	8.98
Brown Umber	9.19YR	1.94	1.43	19.75	4.07	7.39
Burnt Sienna	2.23YR	2.61	6.10	25.87	23.89	23.20
Burnt Umber	9.07YR	1.84	1.18	18.68	3.50	6.17
Cadmium Green	8.74GY	4.33	9.41	44.28	-35.29	44.03
Cadmium Green Light	7.44GY	5.86	10.98	59.55	-36.42	60.52
Cadmium Lemon	9.06Y	9.05	12.69	89.99	-8.36	94.94
Cadmium Orange	1.89YR	6.17	17.97	61.20	55.60	86.32
Cadmium Purple	8.22R	2.12	9.20	20.87	36.48	19.14
Cadmium Red Deep	7.17R	3.08	12.92	30.41	52.61	32.71
Cadmium Red Light	9.29R	5.13	17.97	51.19	64.23	70.20
Cadmium Red Medium	8R	3.92	16.05	39.08	60.78	48.20
Cadmium Red Purple	7.6R	2.65	11.35	25.94	46.20	26.51
Cadmium Red Vermilion	9.02R	4.88	17.67	48.69	63.87	65.68
Cadmium Yellow Deep	8.98YR	7.78	17.19	76.43	30.57	106.34
Cadmium Yellow Extra Deep	4.12YR	6.88	18.56	67.92	49.15	98.67
Cadmium Yellow Light	6.07Y	8.89	15.10	87.77	1.66	108.96
Cadmium Yellow Medium	2.73Y	8.45	16.78	83.08	16.80	111.85
Canton Rose	8.75R	6.45	6.07	65.42	23.24	18.34
Carl's Crimson	9.33R	2.03	9.80	19.69	39.23	22.88
Cerulean Blue	2.42PB	3.37	9.65	37.28	-13.00	-36.12
Cerulean Blue French	1.61PB	2.61	8.65	29.58	-15.71	-32.11
Chromium Oxide Green	9.77GY	3.83	5.20	38.97	-19.81	18.86
Cinnabar Green Light	3.62GY	6.91	10.35	62.97	-20.15	60.11
Cobalt Blue	6.42PB	2.25	13.27	26.58	8.91	-49.14
Cobalt Blue Deep	6.82PB	2.20	15.36	26.17	17.72	-55.12
Cobalt Green	8.92G	2.48	5.72	25.98	-27.10	4.47
Cobalt Teal Bluish	0.83B	5.07	10.26	54.35	-46.55	-20.02
Cobalt Teal Greenish	8.23BG	4.95	9.98	53.05	-48.91	-13.02

Cobalt Turquoise Bluish	9.43B	2.58	8.05	28.99	-20.43	-28.74
Cobalt Turquoise Greenish	8.44BG	3.32	7.60	35.69	-36.34	-12.05
Cobalt Violet Deep	5.37P	1.42	14.18	15.58	46.22	-40.96
Cobalt Violet Light	6.96P	3.43	19.23	36.07	62.78	-50.30
Cobalt Yellow	2.84Y	6.92	13.14	68.86	13.44	88.55
Cold Black	6.49PB	0.50	0.68	5.20	-0.06	-1.91
Courbet Green	1.54GY	1.29	2.12	13.12	-1.97	10.83
Cyprus Orange	6.48YR	4.86	7.08	48.78	21.54	37.50
Davy's Grey Deep	3.76Y	2.38	0.23	24.46	0.19	1.43
Dianthus Pink	3.01RP	7.70	8.07	78.38	28.91	-7.38
Dutch Brown (Transparent)	5.45YR	2.34	0.69	23.85	2.79	2.96
Earth Green	1.6GY	3.19	2.50	32.14	-1.89	15.43
Egyptian Violet	8.23P	0.57	0.65	6.27	1.50	-1.84
Fanchon Red	8.64R	4.01	17.22	39.76	62.80	59.63
Flake White	4.9Y	9.58	0.31	96.73	-0.22	2.68
French Ardoise Grey	8.37Y	4.64	0.99	47.63	-0.87	7.15
French Brown Ochre	6.24YR	2.78	2.68	27.96	9.41	12.91
French Burnt Ochre	4.3YR	2.57	1.43	25.95	5.94	6.01
French Burnt Umber	9.06YR	1.76	0.84	17.89	2.55	4.29
French Cassell Earth	7.2YR	1.00	0.10	10.13	0.33	0.35
French Light Sienna	2.54Y	3.21	3.36	32.34	5.33	20.84
French Noir Indien	7.68YR	2.10	0.13	21.67	0.45	0.62
French Ochre Havanna	4.66YR	4.06	7.40	40.65	24.29	35.45
French Raw Sienna	8.18YR	4.03	4.10	40.64	12.21	23.21
French Raw Umber	0.98Y	2.95	1.91	29.64	4.18	11.03
French Rouge Indien	0.95YR	3.38	5.98	33.92	24.77	21.51
French Terre Verte	5.67G	3.37	3.12	34.48	-14.93	5.32
French Yellow Ochre Deep	8.3YR	4.97	7.80	49.73	19.91	44.95
German Earth	6.84YR	1.98	0.04	20.37	0.16	0.24
Graphite Grey	7.6YR	3.30	0.15	33.90	0.50	0.82
Green Gold	1.95GY	2.87	5.84	28.67	-7.28	38.39
Indanthrone Blue	7.78P	0.46	3.70	4.74	8.70	-8.90
Indian Yellow	5.37YR	6.48	17.44	64.01	42.46	97.90
Indigo	7.09B	0.75	0.95	8.04	-2.23	-3.09
Italian Black Roman Earth	2.92Y	1.84	0.14	18.99	0.23	0.90
Italian Burnt Sienna	1.61YR	2.84	4.26	28.47	17.77	15.46
Italian Green Ochre	9.4YR	3.71	3.45	37.35	8.90	20.32
Italian Lemon Ochre	9.72YR	6.01	8.41	60.14	18.13	50.84
Italian Orange Ochre	4.74YR	3.91	5.48	39.32	18.88	26.10
Italian Pink	2.74YR	2.49	1.95	25.09	8.49	7.22
Italian Pompeii Red	0.34YR	3.88	7.28	39.08	29.40	25.69
Italian Pozzuoli Earth	1.12YR	3.60	6.72	36.09	26.89	25.07
Italian Raw Sienna	8.34YR	4.16	5.10	41.76	13.92	29.14
Italian Raw Umber	3.96Y	2.24	0.73	22.73	0.80	4.25
Italian Rosso Veneto	9.6R	3.72	6.32	37.55	26.53	20.46
Italian Terra Rosa	1.75YR	3.17	4.15	31.98	17.40	15.75
Italian Terra Verte	0.37G	3.13	2.80	31.85	-10.28	8.76
Italian Yellow Ochre	9.73YR	5.45	6.74	54.62	15.28	40.83
Ivory Black	5.16PB	1.03	0.08	10.83	-0.03	-0.34
Jaune Brilliant	9.06YR	7.97	6.67	79.68	14.52	39.01

King's Blue	1.44PB	6.63	9.51	70.02	-16.69	-33.46
Lamp Black	4.52PB	1.39	0.11	14.54	-0.03	-0.45
Manganese Violet	8.53P	1.14	9.16	12.40	31.87	-25.04
Mars Black	8.34YR	0.82	0.19	8.73	0.77	0.94
Mars Orange	2.62YR	4.17	7.30	41.87	26.74	31.11
Mars Orange Deep	2.26YR	3.04	7.16	30.22	27.44	29.27
Mars Red	10R	2.70	7.60	26.64	31.86	23.90
Mars Red Light	1.26YR	3.06	8.18	30.31	32.28	31.26
Mars Violet	9.07R	2.26	6.06	22.67	25.78	15.20
Mars Yellow Deep	7.74YR	4.70	7.80	47.17	20.44	43.69
Mars Yellow Light	0.43Y	5.54	8.72	55.25	17.38	54.18
Montserrat Orange	9.85R	6.70	9.83	67.45	36.29	34.36
Naples Reddish	1.5YR	6.20	9.00	62.25	33.71	34.28
Naples Yellow	0.62Y	7.34	6.91	73.38	13.03	42.45
Naples Yellow Italian	0.99Y	8.07	8.23	80.41	12.81	52.07
Naples Yellow Reddish	6.39YR	7.35	7.83	73.58	22.17	40.71
Nickel Azo Yellow	5.0Y	3.10	4.80	31.26	3.01	31.69
Nickel Yellow	9.23Y	8.61	8.21	85.89	-6.46	61.11
Olive Green	5.37GY	2.67	6.03	26.50	-14.12	32.92
Payne's Grey	8.12PB	0.39	1.49	4.22	0.34	-3.62
Payne's Grey (Violet)	3.26YR	1.31	0.33	13.80	1.43	1.28
Permanent Crimson	0.48YR	1.64	11.14	15.78	44.79	23.48
Permanent Green	0.64G	3.61	11.21	36.82	-46.17	38.38
Permanent Green Light	0.37G	5.76	14.88	58.94	-61.58	60.70
Permanent Lemon	8.18Y	8.74	13.18	86.66	-4.96	97.05
Permanent Orange	0.5YR	5.18	15.80	51.85	52.23	68.43
Permanent Red-Orange	9.54R	4.46	16.11	44.23	57.91	63.31
Permanent Yellow Deep	5.11YR	7.19	19.13	70.50	46.69	105.95
Permanent Yellow Light	6.51Y	8.85	14.46	87.66	-0.47	105.55
Permanent Yellow Medium	2.56Y	8.38	16.95	82.39	17.65	112.46
Persian Rose	3.94R	5.01	14.74	50.65	59.45	24.81
Perylene Crimson	9.38R	1.48	5.36	14.96	22.86	11.00
Phthalo Blue	9.61PB	0.60	12.00	7.75	22.12	-33.56
Phthalo Green	1.42B	0.67	3.54	8.31	-13.77	-6.37
Phthalo Green-Yellowish	2.43BG	0.93	4.26	10.70	-22.08	0.02
Phthalo Turquoise	2.54PB	0.62	2.76	7.62	-5.13	-8.89
Provence Violet Bluish	9.82PB	2.74	12.98	29.87	26.42	-45.99
Provence Violet Reddish	3.51RP	3.22	10.57	33.19	39.76	-14.69
Prussian Blue	1.55RP	0.10	1.99	1.22	1.58	-1.32
Pyrrole Orange	9.6R	5.30	18.10	52.33	64.02	74.85
Pyrrole Red	8.5R	3.70	16.80	36.73	63.15	54.86
Quinacridone Gold Brown	1.88YR	1.03	2.13	10.65	10.74	5.97
Quinacridone Magenta	6.33R	1.97	7.67	19.37	31.88	9.36
Quinacridone Red	7.44R	3.20	12.75	31.61	53.23	32.93
Quinacridone Violet	7.16R	1.54	8.14	15.17	34.72	8.96
Raw Sienna	8.31YR	4.42	6.95	44.39	17.98	39.66
Raw Umber	6.41Y	1.83	1.18	18.68	0.42	7.03
Red Ochre	0.79YR	3.27	5.64	32.64	23.68	19.89
Red Umber	5.56YR	1.73	2.78	17.33	10.49	12.37
Sap Green	1.13G	1.70	3.53	17.57	-13.25	8.38

Sevres Blue	1.16PB	5.05	11.92	55.06	-21.60	-41.64
SF Cerulean Blue French	1.8PB	2.60	8.75	29.53	-15.20	-32.68
SF Cobalt Violet Light	6.65P	3.25	20.30	34.46	65.94	-53.36
SF Flake White	2.81Y	9.61	0.28	97.00	-0.04	2.26
SF French Ardoise Grey	8.05Y	4.63	1.08	47.53	-0.89	7.87
SF Italian Terra Verte	0.35G	3.15	3.15	32.13	-11.69	10.11
SF Porcelain White	9GY	9.63	0.20	97.46	-1.06	1.33
SF Titanium White	5.41GY	9.79	0.16	98.97	-0.97	1.80
SF Ultramarine Blue	8.8PB	0.33	20.78	5.41	29.80	-43.17
SF Ultramarine Pink	6.88RP	1.88	7.40	18.84	31.04	-7.67
SF Ultramarine Violet	0.33P	0.75	9.05	8.74	19.78	-28.70
Silver White	8.19Y	9.63	0.27	97.14	-0.53	2.45
Spanish Earth	8.45R	2.29	2.86	23.27	13.21	6.79
Stil De Grain	8.04YR	2.99	2.31	30.21	7.58	12.19
Titan Buff	7.6YR	8.90	2.00	89.87	4.61	12.28
Titanium - Zinc White	2.01GY	9.74	0.26	98.37	-0.98	2.76
Titanium White	2.7GY	9.73	0.24	98.24	-0.99	2.58
Transparent Red Iron Oxide	3.1YR	1.20	2.70	12.45	12.89	9.58
Transparent Yellow Iron Oxide	9.2YR	2.00	3.20	19.78	9.00	16.62
Turkey Umber	4.91GY	1.64	1.53	16.82	-3.06	6.07
Turquoise	4.08BG	4.46	9.57	47.59	-51.77	-2.33
Ultramarine Blue	9.01PB	0.32	18.16	4.78	24.88	-37.90
Ultramarine Blue French	8.94PB	0.66	11.57	8.14	20.48	-33.63
Ultramarine Pink	6RP	1.76	6.90	17.95	28.42	-9.06
Ultramarine Violet	0.71P	0.66	8.26	7.68	17.32	-25.45
Unbleached Titanium	2.18Y	7.45	2.82	75.34	2.46	19.65
Unbleached Titanium Pale	1.87Y	7.92	1.84	80.10	1.45	13.32
Van Dyke Brown	5.37YR	1.27	0.10	13.24	0.35	0.36
Veronese Green	7.46G	4.79	11.18	50.51	-59.34	14.09
Viridian	1.51BG	2.01	6.32	21.45	-30.20	1.05
Yellow Ochre	9.62YR	5.55	8.69	55.50	18.84	52.68
Yellow Ochre Burnt	7.92YR	4.14	3.96	41.66	11.67	22.01
Zinc White	2.95GY	9.60	0.22	96.90	-0.88	2.24

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