

ACADEMY GRUMBACHER WATERCOLOR ARTIST'S PAINT

TECHNICAL SPECIFICATIONS

Color Name	Part #	Pigment Chemical Class	C.I. Name	C.I. Number	Grumbacher LFR	ASTM LFR	STA/SED	HL
Alizarin Crimson	A001	Synthetic 1:2 Dihydroxyanthraquinone on Alumina Base	PR83	58000	IV	IV	STA	CL
Alizarin Orange	A005	Arylide Yellow RN Gamma Quinacridone Nickel Complex Azo	PY65 PR209 PY150	11740 73905 NA	II	I	STA	CL
Burnt Sienna	A023	Calcined Natural Iron Oxide containing Manganese	PBr7	77492	I	I		AP
Burnt Umber	A024	Calcined Natural Iron Oxide containing Manganese	PBr7	77492	I	I		AP
Cadmium Orange Hue	A025	Arylide Yellow RN Quinaphtholone Benzimidazolone Orange H5G Naphthol AS	PY65 PY138 PO62 PR188	11740 56300 11775 71130	II	II		CL
Cadmium Red Deep Hue	A026	Naphthol Carbamide Synthetic Hydrated Iron Oxide Synthetic Red Iron Oxide	PR170 PY42 PR101	12475 77492 77491	II	I	STA	CL
Cadmium Red Light Hue	A027	Arylide Yellow FGL Arylide Yellow RN Anthraquinone Naphthol AS	PY97 PY65 PR178 PR188	11767 11740 71155 71140	II	I	STA	CL
Cadmium Red Medium Hue	A029	Perylene Anthraquinone Disazo	PR149 PR178 PR166	71137 71155 NA	II	I	STA	AP
Cadmium Yellow Deep Hue	A031	Arylide Yellow Rn Arylide Yellow FGL	PY65 PY3	11740 11767	II	I		CL
Cadmium Yellow Medium Hue	A034	Arylide Yellow RN Arylide Yellow 10G	PY65 PY3	11740 11710	I	I		AP
Cadmium Yellow Pale Hue	A036	Arylide Yellow 10G Arylide Yellow FGL	PY3 PY97	11710 11767	II	I		AP
Carmine Hue	A038	Gamma Quinacridone Red Quinacridone Violet	PV19 PV19	73900 73900		I	STA	CL
Cerulean Blue Hue	A039	Copper Phthalocyanine Complex Silicate of Sodium and Aluminum with Sulfur Amorphous Carbon produced by charring Animal Bones Zinc Oxide	PB15:4 PB29 PBk9 PW4	74260:4 77007 77267 77947	II	I		CL
Charcoal Gray	A042	Nearly Pure Amorphous Carbon	PBk6	77266	I	I		AP

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Chinese White	A043	Titanium White	PW6:1	77891:1	I	I		AP
Chromium Oxide Green (Opaque)	A048	Anhydrous Chromium Sesquioxide	PG17	77288	I	I		CL
Cobalt Blue Hue	A049	Complex Silicate of Sodium and Aluminum with Sulfur	PB29	7077	I	I		AP
Davy's Gray	A064	Copper Phthalocyanine Amorphous Carbon produced by charring Animal Bones Natural Iron Oxide Complex Silicate of Sodium and Aluminum with Sulfur	PB15:4 PBk9 PBr7 PB29	74160:4 77267 77492 77007	II	I		AP
Emerald Green	A067	Chlorinated Copper Phthalocyanine Arylide Yellow 10G	PG7 PY3	74260 11710	II	I		AP
Gamboge Hue	A077	Arylide Yellow RN Quinophtholone Benzimidazolone Orange H5G	PY65 PY138 PO62	11740 56300 11775	II	I		AP
Geranium Lake	A078	Perylene Disazo Naphthol Carbamide	PR149 PR166 PR170	77137 20730 12475	II	I	STA	AP
Golden Yellow	A081	Arylide Yellow RN Arylide Yellow 10G	PY65 PY3	11740 11710	II	I		AP
Green Earth Hue	A085	Natural Iron Oxide containing Manganese Hydrous Chromium Sesquioxide	PBr7 PG18	77492 77289	I	I		CL
Grumbacher Red (Naphthol Red)	A095	Naphthol Carbamide Naphthol AS	PR170 PR188	12475 12467	II	I		AP
Hooker's Green Deep Hue	A106	Copper Phthalocyanine Chlorinated and Brominated Phthalocyanine Arylide Yellow FGL Nearly Pure Amorphous Carbon Arylide Yellow RN	PB15:4 PG36 PY97 PBk6 PY65	74260:4 74265 11767 77266 11740		I	STA	AP
Hooker's Green Light Hue	A107	Chlorinated and Brominated Phthalocyanine Arylide Yellow FGL Arylide Yellow RN Amorphous Carbon produced by charring Animal Bones	PG7 PY97 PY65 PBk9	74260 11767 11740 77267	II	I	STA	AP
Indian Red Hue	A110	Synthetic Red Iron Oxide (Bluish Hue) Natural Hydrated Iron oxide	PR101 PY43	77491 77492	I	I		AP
Indian Yellow Hue	A111	Arylide Yellow RN	PY65	11740	II	II		CL

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Indigo Hue	A112	Complex Silicate of Sodium and Aluminum with Sulfur Gamma Quinacridone Nearly Pure Amorphous Carbon	PB29 PV19 PBk7	77007 73900 77266	I	I		CL
Ivory Black	A115	Amorphous Carbon produced by charring Animal Bones	PBk9	77267	I	I		AP
Lemon Yellow	A118	Arylide Yellow 10G	PY3	11710	II	I		CL
Light Red Hue (English Red Light)	A120	Synthetic Red Iron Oxide (Bluish Hue) Natural Hydrated Iron oxide	PR101 PY43	77491 77492	I	I		CL
Magnesium Green	A133	Oxides of Cobalt and Chromium	PB36	77343	I	I	SED	CL
Mauve (Dioxazine Purple)	A139	Carbazole Dioxazine	PV23	51316	IV	II	STA	AP
Naples Yellow Hue	A146	Arylide Yellow 10G Calcined Natural Iron Oxide Anthraquinine Titanium Dioxide	PY3 PBr7 PR178 PW6	11710 77492 71155 77891	II	II		CL
Olive Green Hue	A150	Arylide Yellow 10G Arylide Yellow RN Calcined Natural Iron Oxide Chlorinated Copper Phthalocyanine	PY3 PY65 PBr7 PG7	11710 11740 77492 74260	II	I		AP
Payne's Gray	A156	Copper Phthalocyanine Complex Silicate of Sodium and Aluminum with Sulfur Nearly Pure Amorphous Carbon	PB15:4 PB29 PBk6	74160:4 77007 77266	II	I		AP
Permanent Green Light	A162	Arylide Yellow 10G Chlorinated and Brominated Phthalocyanine	PY3 PG36	11710 74265	II	II		CL
Perylene Maroon	A163	Perylene	PR179	71130	I	I	STA	AP
Prussian Blue	A168	Ferri-Ammonium Ferrocyanide	PB27	77510	I	I	STA	CL
Raw Sienna	A171	Natural Iron Oxide containing Manganese Synthetic Hydrated Iron Oxide	PBr7 PY42	77492 77492	I	I		AP
Raw Umber Hue	A172	Natural Iron Oxide containing Manganese Calcined Natural Iron Oxide Synthetic Hydrated Iron Oxide	PBr7 PBr7 PY42	77492 77492 77492	I	I		AP

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Rose Madder Hue	A182	Synthetic 1:2 Dihydroxyanthraquinne on Alumina Base	PR83	58000	IV	IV	STA	AP
Sap Green	A187	Quinacridone Nickel Complex Azo Copper Phthalocyanine Chlorinated Copper Phthalocyanine	PO48 PY150 PB15:4 PG7	NA NA 74160:4 74260	I	I		CL
Sepia Hue	A192	Calcined Natural Iron Oxide Synthetic hydrated Iron Oxide Nearly Pure Amorphous Carbon	PBr7 PY42 PBk6	77492 77492 77266	I	I		AP
Thalo Blue	A203	Copper Phthalocyanine	PB15:4	74160:4	II	I	STA	CL
Thalo Crimson	A204	Gamma Quinacridone Red	PV19	73900	II	I	STA	AP
Thalo Green (Blue Shade)	A205	Chlorinated Copper Phthalocyanine	PG7	74260	I	I	STA	AP
Thalo Red	A207	Gamma Quinacridone Red	PV19	73900	II	I	STA	AP
Thalo Yellow Green	A210	Chlorinated and Brominated Phthalocyanine Arylide Yellow 10G	PG36 PY3	74265 11710	II	II	STA	AP
Thio Violet	A211	Gamma Quinacridone Perylene	PV19 PV29	73900 71129	I	I	STA	AP
Turquoise	A213	Copper Phthalocyanine Chlorinated Copper Phthalocyanine	PB15:4 PG7	74160:4 74260	II	I		AP
Ultramarine Blue	A219	Complex Silicate of Sodium and Aluminum with Sulfur	PB29	77007	I	I		AP
Van Dyck Brown Hue	A222	Calcined Natural Iron Oxide Calcined Natural Iron Oxide containing Maganese Nearly Pure Amorphous Carbon	PBr7 PBr7 PBk6	77492 77492 77266	I	I		CL
Vermilion Hue	A224	Arylide Yellow RN Naphthol AS	PY65 PR188	11740 12467	II	I	STA	CL
Violet (Thalo Purple)	A229	Carbazole Dioxazine Copper Phthalocyanine	PV23 PB15:4	51319 74160:4	II	II	STA	AP
Viridian	A232	Hydrous Chromium Sesquioxide Chlorinated Copper Phthalocyanine	PG18 PG7	77289 74260	I	I		CL
Yellow Ochre Hue	A242	Synthetic Hydrated Iron Oxide	PY42	77492	I	I		AP

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C.I. Name **COLOR INDEX NAME**

STA / SED

C.I. Number **COLOR INDEX NUMBER**

STA Staining

Standard name and number assigned to a pigment in the Colour Index.
Example: Titanium Dioxide is PW6 (Pigment White 6) 77891

SED Sedimentary

NA - Not Assigned

Blank Neither

NT - Not Tested

**Grumbacher
LFR**

LIGHTFASTNESS RATING

Based on independent tests

I Excellent

II Very Good

III Moderate

IV Fugitive

HL HEALTH LABEL

Labeling recommendations by the Art & Craft Material Institute's Toxicologist. Complies with the Federal Labeling of Hazardous Art Materials Act.

ASTM LFR

ASTM LIGHTFASTNESS RATING

Published by the American Society for Testing Materials

I Excellent

II Very Good

III Not Sufficient (May be satisfactory when used full strength, or with extra protection from exposure to light)

IV Not sufficient to meet Standard (Fugitive)

NT Not Tested

AP Approved Product ; no health labeling required(non-toxic)

CL Health Labeling required; read and follow warnings on label.