
ART & CREATIVE MATERIALS INSTITUTE - ACMI



HOLBEIN is a member of the Art & Creative Materials Institute (ACMI), the world leader in Toxicological Services to the makers of Artist Materials. The ACMI Certification program has been in existence for over 60 years. ACMI's Toxicologist, Dr. Woodhall Stopford, is Board Certified as a physician and has over 20 years experience evaluating over 75,000 art material formulae for ACMI members, including HOLBEIN. In addition to being one of the world's leading Toxicologists, Dr. Stopford has a M.S.P.H. (Master in Science and Public Health) and is the Chair of two ASTM Standard Development Sub-Committee groups.

All HOLBEIN art materials are labeled in conformance with the ASTM D-4236 Health Standard and Labeling for Hazardous Art Materials (LHAMA).

ACMI has recently adopted two new labels designed to indicate to the user of art materials the nature of any material's health hazard. The "AP" seal indicates that the product is safe for use because it contains little or no material in sufficient quantity to pose any health risk. Products bearing the "CL" (Cautionary Label) Seal identify products that are certified to be properly labeled in a program of toxicological evaluation by a medical expert for any known health risk and with information on the safe use of these materials. These products are also certified by ACMI to be labeled in accordance with the chronic hazard labeling standard, ASTM D-4236, and the U.S. Labeling of Hazardous Materials Act (LHAMA).

Regardless of labeling, basic precautions should always be observed when using art materials.

- Read the labels of the products you are using and follow any precautions indicated.
- Only use materials in a well ventilated room or studio.
- Use a damp mop on studio surfaces to keep dust levels low, especially when using pastels.
- Do not spray apply paint without proper ventilation or an exhaust hood system.
- Do not eat or drink when using toxic materials and keep brushes away from your mouth.
- Clean up properly. Consider wearing gloves or buying a good barrier cream. Wear an appropriate mask of safety glasses when needed.
- Do not share toxic materials with children. Use age appropriate materials.
- Do not dispose of toxic materials by pouring down a drain. Re-use them or dispose of them at an appropriate disposal facility in your community.















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HOLBEIN ARTIST OIL COLOR

Ref No.	Color Name	Chemical Name	Series	Perm Rating	Color Index Number	Color Index Name	Munsell Rating
H223	Alizarin Crimson	Alizarin Lake	B	***	58000	PR83	2.1R 2.6/5.7
H220	Alps Red	Quinacridone Pigment	D	***	46500	PV19	3.6R 3.2/9.1
H248	Aureolin	Potassium Cobaltinitrite	E	***	77357	PY40	2.5Y 7.1/10.3
H293	Baryte Green	Polychloro-Bromo Copper Phthalocyanine Titanium Dioxide	B	**	74265 77891	PG36, PW6	4.2G 6.1/11.2
H357	Blue Black	Complex of Silica, Alumina, Soda & Sulphur Carbon, Calcium Phosphate, Carbon	A	*** N	77007 77267, 77266	PB29, PBk9	4.1PB 2.1/0.4
H370	Blue Grey	Complex of Silica, Alumina, Soda & Sulphur Titanium Dioxide	A	**	77007 77891	PB29, PW6	4.3PB 5.9/8.6
H222	Bright Red	Monoazo Pigment, Monoazo Lake	B	***	12467, 15865	PR48:2, PR188	5.6R 3.9/13.1
H221	Brilliant Pink	Monoazo Pigment, Titanium Dioxide	B	*	12467, 77891	PR188, PW6	1.8R 6.0/13.3
H355	Brown Pink	Isondolone Pigment, Anthraquinoid Pigment	B	***	65300	PR177, PY110	7.2R 3.2/5.7
H345	Burnt Sienna	Native Earth (Iron-Oxide) Native Earth (Iron-Manganese Oxide)	A	****	77491, 77499 77491, 77499, 77727	PBr7	8.5R 3.2/2.8
H344	Burnt Umber	Native Earth (Iron-Manganese Oxide)	A	****	77491, 77499, 77727	PBr7	5.9R 2.8/0.6
H282	Cadmium Green	Hydrous Chromium Sesquioxide Cadmium Sulfide	D	***	77289 77199	PY37, PG18	2.7G 4.4/7.1
H283	Cadmium Green Deep	Hydrous Chromium Sesquioxide Cadmium Sulfide	D	***	77289 77199	PY37, PG18	8.1G 3.2/3.6
H296	Cadmium Green Light	Hydrous Chromium Sesquioxide Cadmium Sulfide	D	***	77289 77199	PY37, PG18	7GY 6.8/10.3
H281	Cadmium Green Pale	Hydrous Chromium Sesquioxide Cadmium Sulfide	D	***	77289 77199	PY37, PG18	1.2G 5.1/7.9
H225	Cadmium Maroon	Cadmium Sulfo- Selenide	E	***	77196	PR108	3.5R 3.0/4.5
H257	Cadmium Orange	Cadmium Sulfo- Selenide	E	***		PO20	1YR 6.5/15.0
H210	Cadmium Orange Red Shade	Cadmium Sulfo- Selenide	E	***	77202	PR108	8.9R 5.6/15.3
H254	Cadmium Orange Yellow Shade	Cadmium Sulfo- Selenide	D	***	77196, 77202	PO20	2YR 6.6/14.2
H207	Cadmium Red	Cadmium Sulfo- Selenide	E	***	77202	PR108	6R 4.5/14.5
H209	Cadmium Red Deep	Cadmium Sulfo- Selenide	E	***	77202	PR108	5.5R 4.5/14.1
H208	Cadmium Red Light	Cadmium Sulfo- Selenide	E	***	77202	PR108	6.3R 4.9/15.1
H211	Cadmium Red Purple	Cadmium Sulfo- Selenide	E	***	77202	PR108	3.9R 3.8/12.0
H252	Cadmium Yellow	Cadmium Sulfide, Cadmium Sulfo-Selenide	D	***	77199, 77196, 77202	PO20, PY37	8.6YR 7.8/13.3
H253	Cadmium Yellow Deep	Cadmium Sulfo-Selenide	D	***	77196, 77202	PO20	6.6YR 7.4/13.4
H249	Cadmium Yellow Lemon	Cadmium Sulfide	D	***	77199	PY37	8.5Y 9.0/11.3
H251	Cadmium Yellow Light	Cadmium Sulfide	D	***	77199	PY37	3Y 8.3/13.3
H250	Cadmium Yellow Pale	Cadmium Sulfide	D	***	77199	PY37	6.3Y 8.8/12.5
H202	Carmine	Condensed Azo Pigment	B	***	-	PR221	3.8R 2.7/7.0
H321	Cerulean Blue Red Shade	Cobalt Stannate	E	****	77368	PB35	6PB 4.0/10.5
H305	Cerulean Blue	Cobalt Stannate	E	****	77368	PB35	5.1PB 4.0/10.4
H306	Cerulean Blue Hue	Copper Phthalocyanine, Titanium Dioxide	A	**	74160, 77891	PB15, PW6	5.9PB 3.7/12.1
H368	Charcoal Grey	Carbon	A	****	77268	PBk8	9B 2.5/0.5
H213	Chinese Red	Monoazo Pigment	B	**	12467	PR188	5.9R 4.0/11.8
H217	Chinese Vermillion	Mercury Sulfide	G	***	77766	PR106	5R 4.1/12.9
H292	Cinnabar Green	Nickel- Antimony Titanate, Disazo Pigment Polychloro-Bromo Copper Phthalocyanine Native Earth (Hydrous Iron Oxide)	B	***	77788 74265 77492	PY43, PY53, PY128, PG36	6.2GY 5.1/5.8
H291	Cinnabar Green Light	Nickel- Antimony Titanate, Disazo Pigment Native Earth (Hydrous Iron Oxide) Polychloro Copper Phthalocyanine	B	***	77788 77492 74260	PY43, PY53, PY128, PG7	1GY 7.1/7.7
H301	Cobalt Blue	Cobalt Aluminate	E	****	77346	PB28	8.6PB 2.5/9.0
H303	Cobalt Blue Deep	Cobalt Aluminate	E	****	77346	PB28	8.9PB 2.5/8.8
H304	Cobalt Blue Hue	Complex of Silica, Alumina Soda & Sulphur Copper Phthalocyanine, Titanium Dioxide	A	*** N	77007 74160, 77891	PB15, PB29, PW6	8.6PB 2.5/10.6
H302	Cobalt Blue Pale	Cobalt Aluminate	E	****	77346	PB28	8.5PB 3.1/11.6
H295	Cobalt Green	Zinc Cobalt Oxide	D	****	77335	PG19	4.5BG 3.5/4.0
H273	Cobalt Green Deep	Zinc Cobalt Oxide	D	****	77335	PG19	10.7G 3.1/3.0
H272	Cobalt Green Pale	Zinc Cobalt Oxide	D	****	77335	PG19	6.8BG 4.9/5.2
H316	Cobalt Turquoise	Cobalt-Chromium Aluminate	E	****	77343	PB36	1.1B 3.9/5.3
H329	Cobalt Violet	Cobalt Lithium Phosphate	H	****	77363	PV47	5.1P 3.7/12.0
H331	Cobalt Violet Deep	Cobalt Phosphate	H	****	77360	PV14	1.5RP 2.6/4.6

H330	Cobalt Violet Light	Cobalt Arsenate	N/A	****		(Cobalt Arsenate)	6.0P 3.9/13.0
H332	Cobalt Violet Light Hue	Alizarin Lake, Cobalt Aluminate, Titanium Dioxide	B	*	58055, 77346, 77891	PR122, PB28, PW6	5.5P 3.1/9.0
H311	Compose Blue	Copper Phthalocyanine, Titanium Dioxide	A	*	74160, 77891	PB15, PW6	10PB 5.3/9.4
H284	Compose Green	Hydrous Chromium Sesquioxide Cadmium Sulfide, Titanium Dioxide	C	***	77289 77199, 77891	PY37, PG18, PW6	1.7G 7.3/6.5
H206	Coral Red	Cadmium Sulfo-Selenide, Titanium dioxide	B	***	77202, 77891	PR108, PW6	8.4R 6.7/11.3
H201	Crimson Lake	Anthraquinoid Pigment	A	***	65300	PR177	2.8R 2.4/4.2
H375	Davy's Grey	Native Green Earth Native Earth(Iron-Manganese Oxide-Hydroxide) Carbon	A	****	77009, 77727 77491, 77492, 77499 77266, 77730	PG23, PB7, PBk6	7.3GY 3.4/0.3
H274	Emerald Green Nova	Polychloro-Bromo Copper Phthalocyanine Titanium Dioxide	B	**	74265 77891	PG36, PW6	8.6G 5.4/9.5
H216	French Vermilion	Mercury Sulfide	G	***	77766	PR106	8.2R 5.7/13.3
H205	Geranium Lake	Monoazo Pigment	B	**	12467	PR188	6.6R 4.4/13.7
H390	Gold	Titanated Mica, Aluminum Powder	E	***	77019, 77000	PM1	2.2Y 7.3/6.3
H241	Gold Ochre	Native Earth (Hydrous Iron Oxide)	A	****	77492	PY43	7.8YR 4.4/4.3
H372	Green Grey	Anhydrous Chromium Sesquioxide Titanium Dioxide	A	***	77288 77891	PG17, PW6	10.7GY 5.2/3.5
H247	Greenish Yellow	Pigment Dye Copper Complex	C	***	-	PY117	2.9GY 3.0/4.8
H373	Grey of Grey	Titanium Dioxide, Condensed Anilin Pigment Cobalt Lithium Phosphate	A	**	77891, 50440 77363	PV47, PBk1, PW6	PB 6.8/1.8
H317	Horizon Blue	Copper Phthalocyanine, Titanium Dioxide	A	**	74160, 77891	PB15, PW6	7.3B 6.5/7.7
H313	Hydrangea Blue	Copper Phthalocyanine	B	***	74160	PB15	8.2PB 1.9/2.4
H346	Indian Red	Iron Oxide	A	****	77491	PR101	7.0R 3.3/5.0
H255	Indian Yellow	Isoindoline Pigment, Disazo Pigment	B	***	-	PY110, PY128	4.7YR 6.1/12.9
H314	Indigo	Complex of Silica, Alumina Soda & Sulphur Potassium Ferric Ferrocyanide	B	*** N	77007 77510	PB27, PB29	4.7PB 2.1/0.4
H354	Ivory Black	Carbon, Calcium Phosphate, Carbon	A	****	77267, 77266	PBk7, PBk9	3.6PB 2.2/0.2
H261	Ivory White	Nickel- Antimony Titanate, Hydrous Iron Oxide Titanium dioxide	A	***	77788, 77492 77891	PY42, PY53, PW6	6.2Y 9.2/2.3
H233	Jaune Brillant No. 1	Cadmium Sulfo-Selenide, Titanium dioxide	A	***	77196, 77202, 77891	PO20, PW6	10.1YR 8.7/4.9
H234	Jaune Brillant No. 2	Cadmium Sulfo-Selenide, Titanium dioxide	A	***	77196, 77202, 77891	PO20, PW6	5.2YR 8.3/5.5
H235	Jaune Brillant No. 3	Cadmium Sulfo-Selenide, Titanium dioxide	A	***	77196, 77202, 77891	PO20, PW6	2.8YR 6.1/6.4
H236	Jaune Brillant No. 4	Cadmium Sulfide, Hydrous Iron Oxide Titanium Dioxide	A	***	77196, 77202, 77492 77891	PO20, PY42, PW6	7.2YR 7.3/7.2
H356	Lamp Black	Carbon	A	****	77266	PBk6	1.8PB 2.4/0.1
H237	Lemon Yellow	Disazo Pigment, Titanium Dioxide	B	**	21127, 77891	PY81, PW6	9.7Y 9.1/10.2
H238	Lemon Yellow Pale	Cadmium Sulfide, Titanium Dioxide	B	***	77199, 77891	PY37, PW6	3.1GY 9.3/6.1
H339	Light Magenta	Quinacridone Pigment, Titanium Dioxide	B	**	46500, 77891	PV19, PW6	5.7RP 6.1/11.6
H340	Light Red	Iron Oxide	A	****	77491	PR101	8.2R 3.6/6.6
H341	Light Red Bright	Iron Oxide, Orange 69	B	**	77491	PR101, PO69	8.8R 4.5/10.6
H323	Manganese Blue Nova		B	****	77368, 74160	PB35, PB15	4.4PB 3.3/9.1
H350	Mars Orange	Ferric-Magnesium Oxide Native Earth(Iron-Oxide-Hydroxide)	B	****	77495 77491, 77492, 77499	PBr7, PBk11	2.4YR 4.3/6.1
H334	Mars Violet	Iron Oxide	B	****	77491	PR101	4.5R 2.9/3.3
H349	Mars Yellow	Ferric-Magnesium Oxide	B	****	77495	PBr11	5.8YR 4.8/6.9
H335	Mauve	Complex of Silica, Alumina Soda & Sulphur Alizarin Lake	B	*** N	77007 58055	PB29, PV5	8.8P 2.1/1.0
H333	Mineral Violet	Manganese Phosphate	C	****	77742	PV16	8.3P 2.2/5.3
H318	Misty Blue	Complex of Silica, Alumina Soda & Sulphur Titanium Dioxide	A	** N	77007 77891	PB29, PW6	3.7PB 7.7/2.5
H379	Monochrome Tint Cool	Carbon, Calcium Phosphate, Titanium Dioxide	A	***	77267, 77891	PBk9, PW6	3.6PB 4.5/0.5
H378	Monochrome Tint Warm	Ferric-Magnesium Oxide, Titanium Dioxide	A	***	77495, 77891	PBr11, PW6	4.0Y 5.7/3.3
H230	Naples Yellow	Cadmium Sulfide, Hydrous Iron Oxide Titanium Dioxide	A	***	77199, 77492 77891	PY37, PY42, PW6	3.3Y 8.4/6.9
H231	Naples Yellow French	Hydrous Iron Oxide, Disazo Pigment Titanium Dioxide	A	**	77492, 21127 77891	PY42, PY81, PW6	3.0Y 7.5/6.6
H232	Naples Yellow Italian	Cadmium Sulfide, Ferric-Magnesium Oxide Titanium Dioxide	A	***	77199, 77495 77891	PY37, PBr11, PW6	10.2YR 7.6/6.8
H320	Navy Blue	Complex of Silica, Alumina, Soda & Sulphur Polychloro Copper Phthalocyanine Titanium dioxide	B	*** N	77007 74260 77891	PG7, PB29, PW6	5.8PB 2.2/2.9

HOLBEIN ARTIST OIL COLOR (cont.)

Ref No.	Color Name	Chemical Name	Series	Perm Rating	Color Index Number	Color Index Name	Munsell Rating
H369	Neutral Grey	Carbon, Calcium Phosphate Hydrous Iron Oxide, Titanium Dioxide	A	**	77267 77492, 77891	PY42, PBk9, PW6	7.9B 7.5/0.5
H256	Nickel Yellow	Nickel-Barium Titanate	C	****	77900	PY157	3.1GY 8.5/7.6
H290	Olive Green	Polychloro-Bromo Copper Phthalocyanine Anthraquinoid Pigment, Disazo Pigment	B	***	74265 65300	PR177, PY128, PG36	3.8BG 2.3/0.1
H319	Oriental Blue	Copper Phthalocyanine	C	****	74160	PB15	4.7PB 2.2/2.9
H294	Oriental Green	Polychloro Copper Phthalocyanine	B	***	74260	PG7	3.1PB 2.2/1.1
H288	Oxide of Chromium	Anhydrous Chromium Sesquioxide	B	****	77288	PG17	9.8GY 4.1/3.8
H380	Paynes Grey	Complex of Silica, Alumina, Soda & Sulphur Carbon	A	*** N	77007 77266	PB29, PBk6	7.4PB 2.4/0.2
H353	Peach Black	Condensed Anilin Pigment, Carbon	A	***	50440, 77266	PBk1, PBk 6	2.3PB 2.0/0.2
H214	Peony Red	Monoazo Pigment	B	**	12516	PR185	3.8R 3.1/10.7
H279	Permanent Green	Disazo Pigment, Copper Phthalocyanine Nickel- Antimony Titanate	A	***	21095, 74160 77788	PY14, PY53, PB15	2.4G 3.6/5.7
H280	Permanent Green Deep	Disazo Pigment, Copper Phthalocyanine	A	**	21095, 74160	PY14, PB15	9.4G 2.5/2.3
H277	Permanent Green Light	Polychloro Copper Phthalocyanine Nickel- Antimony Titanate, Disazo Pigment	A	***	74260 77788, 21095	PY14, PY53, PG7	6.8GY 6.8/10.6
H278	Permanent Green Pale	Polychloro Copper Phthalocyanine Nickel- Antimony Titanate, Disazo Pigment	A	***	74260 77788, 21095	PY14, PY53, PG7	10.1GY 5.9/11.5
H246	Permanent Orange	Pyrazolone Pigment, Nickel-Antimony Titanate Disazo Pigment	A	***	21115, 77788 21095	PO34, PY14, PY53	1.1YR 6.0/14.2
H338	Permanent Violet	Dioxazine Pigment	C	***	51319	PV23	7.9P 2.1/0.9
H258	Permanent Yellow	Disazo Pigment, Nickel- Antimony Titanate	A	***	21095, 77788	PY14, PY53	10.1YR 7.7/13.3
H245	Permanent Yellow Deep	Nickel- Antimony Titanate, Disazo Pigment Isoindolin Pigment	A	***	77788, 21095 -	PY14, PY53, PY139	10.1YR 7.7/13.5
H243	Permanent Yellow Lemon	Nickel- Antimony Titanate, Disazo Pigment Monoazo Pigment	A	**	77788, 21127 11737	PY53, PY81, PY167	8.9Y 8.7/11.3
H244	Permanent Yellow Light	Nickel- Antimony Titanate, Disazo Pigment Monoazo Pigment	A	***	77788, 21095 11767	PY14, PY53, PY97	5.2Y 8.4/13.0
H259	Permanent Yellow Pale	Disazo Pigment, Nickel- Antimony Titanate	A	***	21127, 21095, 77788	PY53, PY81	6.6Y 8.4/13.8
H219	Perylene Red	Perylene Pigment	D	***	71137	PR149	4.1R 2.9/8.4
H203	Pink Madder	Condensed Azo Pigment	B	***	-	PR221	4.9R 4.4/14.4
H312	Prussian Blue	Potassium Ferric Ferrocyanide	A	**	77510	PB27	1.2PB 2.2/0.6
H298	Prussian Green	Potassium Ferric Ferrocyanide Nickel- Antimony Titanate, Disazo Pigment	B	**	77510, 21095 77788	PY14, PY53, PB27	3.1BG 2.5/1.6
H343	Raw Sienna	Native Earth (Hydrous Iron Oxide)	A	****	77492	PY43	8.7YR 4.2/4.4
H342	Raw Umber	Native Earth (Iron-Manganese Oxide-Hydroxide)	A	****	77491, 77492, 77499 77727, 77730	PBr7	10.5YR 2.8/0.5
H224	Rose Dore	Alizarin Lake, Condensed Azo Pigment	B	***	58000	PR83, PR144	6.2R 4.9/14.4
H376	Rose Grey	Iron Oxide, Titanium Dioxide	A	****	77491, 77891	PR101, PW6	2.4R 4.6/4.1
H204	Rose Madder	Condensed Azo Pigment	B	***	-	PR221	4.0R 3.4/10.9
H336	Rose Violet	Quinacridone Pigment, Titanium Dioxide	B	***	73915, 77891	PR122, PW6	6.9RP 3.6/12.1
H337	Rose Violet Transparent	Quinacridone Pigment	B	***	73915	PR122	2.1R 3.1/10.1
H276	Sap Green	Polychloro Copper Phthalocyanine Disazo Pigment	B	***	74260	PY128, PG7	2.3G 2.5/1.5
H212	Scarlet Lake	Monoazo Pigment, Orange 69	B	**	12467	PR188, PO69	7.2R 4.9/14.4
H351	Sepia	Native Bituminous Earth Carbon, Calcium Phosphate	A	****	77727, 77730 77267	PBr8, PBk9	3.6PB 2.2/0.1
H226	Shell Pink	Monoazo Pigment, Pyrazolone Pigment Titanium dioxide	B	*	12467, 21110 77891	PR188, PW6	3.8R 8.3/5.1
H391	Silver	Aluminium	E	***	77000	PM1	1.3BG 8.2/0.1
H347	Terra Rosa	Iron Oxide	A	****	77491	PR101	8.7R 3.8/6.6
H275	Terre Verte	Native Green Earth	A	****	77009	PG23	2.1G 2.8/0.7
H297	Terre Verte Verona	Native Green Earth Hydrous Chromium Sesquioxide Native Earth (Iron-Manganese Oxide-Hydroxide)	B	****	77009 77289 77491, 77492, 77499	PG23	1.9G 3.0/1.1
H315	Turquoise Blue	Titanium Dioxide, Cobalt Stannate	B	***	77891, 77368	PB35, PW6	2.9B 4.8/7.2
H322	Ultramarine Blue	Complex of Silica, Alumina Soda & Sulphur	A	***	77007	PB29	9.3PB 2.3/6.8
H308	Ultramarine Deep	Complex of Silica, Alumina Soda & Sulphur	A	*** N	77007	PB29	9.3PB 2.4/6.7
H307	Ultramarine Light	Complex of Silica, Alumina Soda & Sulphur	A	*** N	77007	PB29	9.3PB 2.3/6.7

H352	Vandyke Brown	Native Bituminous Earth	A	***	77727, 77730	PBr7, PBk9	7.4B 2.5/0.1
H310	Verditer Blue	Cobalt Aluminate, Titanium Dioxide	C	****	77346, 77891	PB28, PW6	6.9PB 5.3/11.7
H215	Vermilion	Mercury Sulfide	G	***	77766	PR106	6.6R 4.8/12.3
H218	Vermilion Hue	Monoazo Pigment, Orange69	A	**	12467	PR188, PO69	7.3R 5.1/14.1
H374	Violet Grey	Complex of Silica,Alumina,Soda&Sulphur Titanium Dioxide	A	** N	77007 77891	PV15, PW6	7.9PB 5.6/9.8
H270	Viridian	Hydrous Chromium Sesquioxide	C	****	77289	PG18	5.8BG 2.6/1.2
H271	Viridian Hue	Polychloro Copper Phthalocyanine	A	***	74260	PG7	2.2B 2.3/1.6
H371	Yellow Grey	Hydrous Iron Oxide, Iron Oxide Titanium Dioxide	A	***	77492, 77491 77891	PR101, PY42, PW6	9.6YR 5.9/3.6
H240	Yellow Ochre	Native Ochre, Hydrous Iron Oxide	A	****	77492, 77492	PY42, PY43	10.1YR 5.7/6.7
H242	Yellow Ochre Natural	Native Ochre	B	****	77492	PY43	10.1YR 5.2/5.6
H260	Yellow Ochre Pale Natural	Native Ochre	B	****	77492	PY43	10.1YR 6.0/6.9

TRANSPARENT OIL

Ref No.	Color Name	Chemical Name	Perm Rating	Color Index Number	Color Index Name	Munsell Rating
H825	Transparent Black	Carbon	****	77266	PBk7	
H813	Transparent Blue	Copper Phthalocyanine	**	74160	PB15	3.9PB 4.1/12.5
H822	Transparent Brown	Pigment Brown 23	**	-	PBr23	
H816	Transparent Garnet	Quinacridone Pigment	**	46500	PV23	4.8RP 3.9/13.3
H810	Transparent Green	Polychloro Copper Phthalocyanine	**	74260	PG7	2.1G 5.0/10.9
H807	Transparent Lemon	Disazo Pigment	**	21105	PY14	9.4Y 8.6/12.9
H802	Transparent Red	Antraquinoid Pigment	**	65300	PR177	3.4R 4.4/15.1
H801	Transparent Rose	Quinacridone Pigment	**	73915	PR122	5.4RP 4.5/16.5
H803	Transparent Vermilion	Condensed Azo Pigment	**	-	PR144	5.8R 4.9/14.8
H819	Transparent Violet	Disazo Pigment	**	51319	PV23	
H806	Transparent Yellow	Disazo Pigment	**	21105	PY95	3.3Y 7.8/13.1

FOUNDATION OIL

H533	Foundation Greenish	Basic Lead Carbonate, Titanium Dioxide Anhydrous Chromium Sesquioxide	***	77597, 77891 77288	PG17, PW1, PW6	5.7GY 7.7/1.2
H537	Foundation Grey	Basic Lead Carbonate, Titanium Dioxide Carbon, Calcium Phosphate	***	77597, 77891, 77267	PBk9 PW1, 6	4.6GY 8.1/0.3
H535	Foundation Umber	Basic Lead Carbonate, Titanium Dioxide Native Earth(Iron-Manganese Oxide-Hydroxide)	***	77597, 77891, 77727 77491, 77492, 77499, 77730	PBr7 PW1,6	10.1YR 8.5/1.8
H531	Foundation White	Basic Lead Carbonate, Titanium Dioxide	***	77597, 77891	PW1, 6	7.5Y 9.4/0.6

WHITES - ALL SIZES

H519	Ceramic White	Strontium Titanate	****	-	Strontium Titanate	7.6BG 9.2/0.2
H405, H505	Neo-Zinc White	Zinc Oxide	****	77947	PW4	9.8GY 9.4/0.2
H417, H517	Permanent White EX	Titanium Dioxide	****	77891	PW6	10.6GY 9.6/0.1
H415, H515	Permanent White SF	Titanium Dioxide	****	77891	PW6	6.7GY 9.5/0.2
H521	Quick Drying White	Titanium Dioxide	****	77891	PW6	8.3GY 9.4/0.2
H411, H511	Silver White	Basic Lead Carbonate	***	77597	PW1	4.7GY 9.3/0.2
H413, H513	Titanium White	Titanium Dioxide	****	77891	PW6	6.9GY 9.7/0.1

N=Sulfide origin color, avoid admixture with leaden chemical origin colors, i.e. Silver White.

“ECOLSE” OIL COLOR

Ref No.	Color Name	Chemical Name	Perm Rating	Color Index Number	Color Index Name	Munsell Rating
B701	Alizarin Crimson	Alizarin Lake	***	58000	PR83	6.0R 2.5/11.0
B733	Burnt Sienna	Native Earth (Iron Oxide)	****	77491, 77499	PBr7	3.0YR 2.5/5.0
B732	Burnt Umber	Native Earth(Iron-Manganese Oxide)	****	77491, 77499, 77727	PBr7	7.5YR 1.0/1.5
B721	Cadmium Green Deep Hue	Copper Phthalocyanine, Disazo Pigment	**	74160, 21095	PB15, PY14	9.0G 1.5/5.0
B718	Cadmium Green Light Hue	Disazo Pigment, Nickel-Antimony Titanate Polychloro Copper Phthalocyanine	***	21095, 77788 74260	PG7, PY53, PY14	5.5GY 6.5/11.0
B720	Cadmium Green Middle Hue	Disazo Pigment, Copper Phthalocyanine Nickel-Antimony Titanate	***	21095, 74160 77788	PB15, PY14, PY53	2.0G 3.0/8.5
B719	Cadmium Green Pale Hue	Disazo Pigment, Nickel-Antimony Titanate Polychloro Copper Phthalocyanine	***	21095, 74160 74260	PG7, PY3, PY53	9.0GY 5.5/12.5
B702	Cadmium Red Hue	Monoazo Lake	**	15865	PR48	6.5R 4.0/13.0
B710	Cadmium Yellow Deep Hue	Disazo Pigment, Nickel-Antimony Titanate	***	21095, 77788	PY81, PY53	6.0YR 7.0/15.0
B708	Cadmium Yellow Lemon Hue	Monoazo Pigment, Titanium Dioxide	***	11710, 77891	PY3	9.5Y 9.0/11.5
B709	Cadmium Yellow Light Hue	Disazo Pigment, Nickel-Antimony Titanate	***	21095, 77788	PY81, PY53	3.5Y 8.5/14.0
B711	Cadmium Yellow Orange Hue	Disazo Pigment	***	21096	PY81, PR5	1.0YR 6.0/15.5
B724	Cerulean Blue Hue	Copper Phthalocyanine, Titanium Dioxide	**	74160, 77891	PB15, PG7, PW6	2.5PB 3.5/11.5
B722	Cinnabar Green	Nickel-Antimony Titanate, Native Ochre Copper Phthalocyanine	***	77788, 77492 74160	PY43, PY53, PB15	5.5GY 5.0/7.5
B723	Cobalt Blue Hue	Complex of Silica, Alumina, Soda & Sulphur Copper Phthalocyanine, Titanium Dioxide	** N	77007 74160, 77891	PB29, PW6	6.5PB 2.0/13.0
B729	Cobalt Violet Light Hue	Alizarin Lake, Cobalt Aluminate, Titanium Dioxide	*	58055, 77346, 77891	PB83, PB28, PW6	3.5P 3.0/9.0
B725	Compose Blue	Copper Phthalocyanine, Titanium Dioxide	*	74160, 77891	PB15, PW6	7.0B 5.5/9.5
B704	Coral Red	Monoazo Lake, Disazo Pigment, Barium Sulfate White 22, Titanium Dioxide	**	15865 77120, 77891	PR48, PY81, PW6	8.0R 6.0/12.5
B717	Emerald Green Hue	Polychloro Copper Phthalocyanine, Monoazo Pigment, Titanium Dioxide	**	74260 11710, 77891	PG7, PY3, PW6	4.5G 5.0/12.0
B739	Grey of Grey	Ferroso-Ferric Oxide, Titanium Dioxide	**	77499, 77891	PBk1, PW6	4.0B 6.5/0.5
B712	Indian Yellow	Disazo Pigment	**	21108	PY81, PR101, PW24	6.0YR 6.5/15.0
B737	Ivory Black	Carbon, Calcium Phosphate	****	77267	PBk9	N=1.0
B707	Jaune Brillant	Cadmium Sulfo-Selenide, Titanium Dioxide	*** N	77202, 77891	PR108, PY37, PW6	3.0YR 8.0/7.0
B730	Mauve	Alizarin Lake	*	58055	PR83, PW24	1.0R 1.0/4.0
B706	Naples Yellow	Hydrous Iron Oxide, Titanium Dioxide	**	77492, 77891	PY42, PW6	3.5YR 7.5/6.0
B740	Paynes Grey	Complex of Silica, Alumina, Soda & Sulphur Carbon	***	77007 77266	PBk7, PB29	5.0PB 0.5/0.5
B727	Prussian Blue	Potassium Ferric-Ferrocyanide	**	77510	PB33	5.0PB 0.5/10.0
B735	Raw Sienna	Native Earth (Hydrous Iron Oxide)	****	77492	PY43	8.0YR 3.5/5.5
B734	Raw Umber	Native Earth(Iron-Manganese Oxide-Hydroxide)	****	77491, 77492, 77499 77727, 77730	PBr7	2.0Y 1.5/1.0
B738	Red Ochre	Iron Oxide	****	77491	PR101	0.5YR 3.0/7.5
B731	Rose Violet	Quinacridone Pigment	***	73915	PV19	6.5RP 3.5/13.5
B716	Sap Green	Disazo Pigment, Polychloro Copper Phthalocyanine	***	21095, 74260	PG7	2.0G 1.0/3.0
B703	Scarlet Lake	Monoazo Lake, Disazo Pigment, Barium Sulfate Yellow 81, White22, Disazo Pigment	**	15865 77120, 21096	PR48, PY81	7.5R 4.0/15.0
B715	Terre Verte	Native Green Earth	****	77009	PG23	10.0GY 2.5/2.5
B742, B792	Titanium White	Titanium Dioxide	****	77891	PW6, PW22	N=9.5
B728	Turquoise Blue	Trisulfonated Copper Phthalocyanine Lake Titanium Dioxide	*	74200 77891	PG7, PW6	8.0BG 5.0/8.5
B726	Ultramarine Blue	Complex of Silica, Alumina, Soda & Sulphur	*** N	77007	PB29	8.0PB 1.0/12.5
B736	Vandyke Brown	Native Bituminous Earth	***	77727, 77730	PB8	4.0RP 1.0/0.1
B705	Vermillion Hue	Pyrazolone Pigment	**	21110	PR48, PY81	8.0R 5.0/15.0
B714	Viridian (Hue)	Polychloro Copper Phthalocyanine	***	74260	PG7	2.0BG 1.0/5.0
B713	Yellow Ochre	Hydrous Iron Oxide	****	77492	PY42	9.5YR 5.5/8.5
B741, B791	Zinc White	Zinc Oxide	***	77947	PW4, PW6	N=9.5

N=Sulfide origin color, avoid admixture with leaden chemical origin colors, i.e. Silver White.

“DUO” AQUA OIL COLOR

Ref No.	Color Name	Chemical Name	Series	Perm Rating	Color Index Number	Color Index Name
DU201	Alizarin Crimson	Alizarin Lake	B	**	58000	PR83
DU230	Aureolin	Isoindolinone Pigment, Monoazo Pigment	C	***	-, 11710	PY110, PY3
DU275	Blue	Complex Silica, Alumina, Soda & Sulphur	A	***	77007, 74160, 77891	PB29, PB15, PW6
DU334	Blue Grey	Copper Phthalocyanine, Titanium Dioxide	A	N	77007, 77891	PB29, PW6
DU296	Blue Violet	Complex Silica, Alumina, Soda & Sulphur; Titanium Dioxide	A	***	77007, 77891	PB29, PW6
DU296	Blue Violet	Dioxazine Pigment	C	****	-	PV37
DU310	Brown	Iron Oxide	A	****	77491	PR101
DU318	Burnt Sienna	Native Earth (Iron Oxide)	A	****	77491, 77499,	PBr7, PBr7
DU317	Burnt Umber	Native Earth (Iron-Manganese Oxide)	A	****	77491, 77499, 77727	PBr7
DU320	Caramel	Native Earth (Iron-Manganese Oxide)	A	****	77491, 77499, 77727	PBr7
DU271	Cerulean Blue	Isoindolinone Pigment, Anthraquinoid Pigment	B	***	-, 65300	PY110, PR177
DU271	Cerulean Blue	Copper Phthalocyanine, Complex Silica, Alumina, Soda & Sulphur; Titanium Dioxide	B	**	74160, 77007, 77891	PB15, PB29, PW6
DU270	Cobalt Blue	Complex Silica, Alumina, Soda & Sulphur; Copper Phthalocyanine, Titanium Dioxide	B	***	77007, 74160, 77891	PB29, PB15, PW6
DU242	Cobalt Green	Polychloro Copper Phthalocyanine, Copper Phthalocyanine, Titanium Dioxide	B	***	74260, 74160, 77891	PG7, PB15, PW6
DU215	Coral	Monoazo Pigment, Titanium Dioxide	B	**	12467, 77891	PR188, PW6
DU224	Cream	Disazo Pigment, Hydrous Iron Oxide, Titanium Dioxide	B	***	21095, 77492, 77891	PY14, PY42, PW6
DU247	Deep Green	Disazo Pigment, Copper Phthalocyanine, Titanium Dioxide	A	**	21095, 74160, 77891	PY14, PB15, PW6
DU206	Deep Red	Monoazo Pigment	A	**	12475	PR170
DU233	Deep Yellow	Disazo Pigment, Titanium Dioxide	A	***	-, 77891	PY152, PW6
DU241	Emerald Green	Polychloro-Bromo Copper Phthalocyanine, Titanium Dioxide	B	**	74265, 77891	PG36, PW6
DU246	Green	Disazo Pigment, Copper Phthalocyanine Nickel-Antimony Titanate	A	***	21095, 74160, 77788	PY14, PB15, PY53
DU279	Green Blue	Phthalocyanine	C	***	74100	PB16
DU333	Green Grey	Anhydrous Chromium Sesquioxide, Titanium Dioxide	A	***	77288, 77891	PG17, PW6
DU235	Greenish Yellow	Pigment Dye Copper Complex	C	***	-	PY117
DU285	Horizon Blue	Copper Phthalocyanine, Titanium Dioxide	B	**	74160, 77891	PB15, PW6
DU261	Ice Green	Polychloro Copper Phthalocyanine Titanium Dioxide	B	***	74260, 77891	PG7, PW6
DU274	Indigo	Complex Silica, Alumina, Soda & Sulphur; Potassium Ferric-Ferrocyanide	B	***	77007, 77510	PB29, PB27
DU350	Ivory Black	Carbon, Calcium Phosphate, Carbon	A	****	77267, 77266	PBk9, PBk7
DU223	Jaune Brillant	Monoazo Pigment, Monoazo Pigment, Titanium Dioxide	B	**	12467, 11710, 77891	PR188, PY3, PW6
DU302	Lavender	Complex Silica, Alumina, Soda & Sulphur; Titanium Dioxide	B	***	77007, 77891	PB29, PW6
DU250	Leaf Green	Nickel-Antimony Titanate, Disazo Pigment, Native Earth (Hydrous Iron Oxide), Polychloro Copper Phthalocyanine	B	***	77788, -, 77492, 74260	PY53, PY128, PY43, PG7
DU228	Lemon	Monoazo Pigment, Titanium Dioxide,	A	**	11710, 77891	PY3, PW6
DU245	Light Green	Polychloro Copper Phthalocyanine, Disazo Pigment	A	***	74260, 21095	PG7, PY14
DU300	Light Magenta	Quinacridone Pigment, Titanium Dioxide	B	***	46500, 77891	PV19, PW6
DU231	Light Yellow	Disazo Pigment, Monoazo Pigment, Titanium Dioxide	A	***	-, 11680, 77891	PY152, PY1, PW6
DU301	Lilac	Dioxazine Pigment, Titanium Dioxide	B	**	-, 77891	PV37, PW6
DU374	Luminous Green	-	C	-	-	-
DU373	Luminous Lemon	-	C	-	-	-
DU370	Luminous Opera	-	C	-	-	-
DU372	Luminous Orange	-	C	-	-	-
DU371	Luminous Red	-	C	-	-	-
DU202	Madder	Condensed Azo Pigment	B	***	-	PR221
DU234	Marigold	Isoindolinone Pigment, Disazo Pigment	B	***	-, -	PY110, PY128
DU278	Marine Blue	Copper Phthalocyanine	B	**	74160	PB15
DU351	Mars Black	Ferroso-Ferric Oxide	A	****	77499	PBk11

“DUO” AQUA COLOR (cont.)

Ref No.	Color Name	Chemical Name	Series	Perm Rating	Color Index Number	Color Index Name
DU295	Mauve	Alizarin Lake, Complex Silica, Alumina, Soda & Sulphur	B	** N	58055, 77007	PV5, PB29
DU260	Mint Green	Polychloro-Bromo Copper Phthalocyanine, Titanium Dioxide	B	**	74265, 77891	PG36, PW6
DU348	Monochrome 1 (V8)	Titanium Dioxide, Hydrous Iron Oxide, Native Earth (Iron-Manganese Oxide)	A	***	77891, 77492, 77491, 77499, 77727	PW6, PY42, PBr7
DU346	Monochrome 2 (V6)	Titanium Dioxide, Hydrous Iron Oxide, Native Earth (Iron-Manganese Oxide)	A	***	77891, 77492, 77491, 77499, 77727	PW6, PY42, PBr7
DU344	Monochrome 3 (V4)	Titanium Dioxide, Hydrous Iron Oxide, Native Earth (Iron-Manganese Oxide)	A	***	77891, 77492, 77491, 77499, 77727	PW6, PY42, PBr7
DU277	Navy Blue	Complex Silica, Alumina, Soda & Sulphur; Polychloro Copper Phthalocyanine	B	*** N	77007, 74260	PB29, PG7
DU251	Olive Green	Polychloro-Bromo Copper Phthalocyanine Disazo Pigment, Anthraquinoid Pigment	C	***	74265, -, 65300	PG36, PY128, PR177
DU220	Orange	Monoazo Pigment, Monoazo Pigment	A	***	12516, 11710	PR185, PY3
DU332	Orange Grey	Ferric-Magnesium Oxide, Titanium Dioxide	A	***	77495, 77891	PBr11, PW6
DU336	Payne's Grey	Complex Silica, Alumina, Soda & Sulphur; Carbon	A	*** N	77007, 77266	PB29, PBk6
DU460, 560	Permanent White	Titanium Dioxide		****	77891	PW6
DU216	Pink	Monoazo Pigment, Titanium Dioxide	B	*	12467, 77891	PR188, PW6
DU273	Prussian Blue	Potassium Ferric-Ferrocyanide	B	**	77510	PB27
DU249	Prussian Green	Potassium Ferric-Ferrocyanide, Disazo Pigment, Nickel-Antimony Titanate	B	***	77510, 21095, 77788	PB27, PY14, PY53
DU207	Purple Red	Monoazo Pigment	B	**	12516	PR185
DU316	Raw Sienna	Native Earth (Hydrous Iron Oxide)	A	****	77492	PY43
DU315	Raw Umber	Native Earth (Iron-Manganese Oxide-Hydroxide)	A	****	77491, 77492, 77499, 77727, 77730	PBr7
DU205	Red	Monoazo Pigment	A	**	12467	PR188
DU203	Rose	Condensed Azo Pigment	C	***	-	PR144
DU330	Rose Grey	Iron Oxide, Titanium Dioxide	A	****	77491, 77891	PR101, PW6
DU297	Rose Violet	Quinacridone Pigment	C	***	73915	PR122
DU244	Sap Green	Disazo Pigment, Polychloro Copper Phthalocyanine	B	***	-, 74260	PY128, PG7
DU204	Scarlet	Monoazo Pigment, Isoindoline Pigment	B	**	12467, -	PR188, PO69
DU319	Sepia	Native Bituminous Earth, Carbon, Calcium Phosphate	B	****	-, 77727, 77730, 77267	NBr8, PBk9
DU286	Sky Blue	Complex Silica, Alumina, Soda & Sulphur; Titanium Dioxide	A	** N	77007, 77891	PB29, PW6
DU243	Terre Verte	Native Earth (Hydrous Iron Oxide), Nitroso Pigment	B	***	77492, 10006	PY43, PG8
DU461, 561	Titanium White	Titanium Dioxide		****	77891	PW6
DU276	Turquoise Blue	Titanium Dioxide, Copper Phthalocyanine	B	***	77891, 74160	PW6, PB15
DU272	Ultramarine Blue	Complex Silica, Alumina, Soda & Sulphur	A	*** N	77007	PB29
DU208	Vermilion	Monoazo Pigment, Isoindoline Pigment	A	**	12467, -	PR188, PO69
DU290	Violet	Complex Silica, Alumina, Soda & Sulphur; Quinacridone Pigment	B	* N	77007, 73915	PB29, PR122
DU335	Violet Grey	Iron Oxide, Complex Silica, Alumina, Soda & Sulphur; Titanium Dioxide	A	*** N	77491, 77007, 77891	PR101, PB29, PW6
DU240	Viridian	Polychloro Copper Phthalocyanine	B	***	74260	PG7
DU232	Yellow	Disazo Pigment, Monoazo Pigment, Titanium Dioxide	A	***	-, 11680, 77891	PY152, PY1, PW6
DU248	Yellow Green	Polychloro Copper Phthalocyanine, Nickel-Antimony Titanate, Monoazo Pigment	A	***	74260, 77788, 11680	PG7, PY53, PY1
DU331	Yellow Grey	Hydrous Iron Oxide, Iron Oxide, Titanium Dioxide	A	***	77492, 77491, 77891	PY42, PR101, PW6
DU229	Yellow Ochre	Hydrous Iron Oxide	A	****	77492	PY42

N=Sulfide origin color, avoid admixture with leaden chemical origin colors, i.e. Silver White.

HOLBEIN ARTIST WATERCOLOR – 5 & 15ml

Ref No.	Color Name	Chemical Name		Perm Rating	Color Index Number	Color Index Name
W039, 239	Aureolin	Monoazo Pigment, Hydrous Iron Oxide	D	***	11710, 77492	PY3, PY42
W078, 278	Bamboo Green	Polychloro-Bromo Copper Phthalocyanine	B	***		PG36
W150, 350	Blue Grey	Copper Phthalocyanine, Titanium Dioxide	A	**	74160, 77891	PB15, PW6
W170, 370	Bright Rose (Luminous)	Fluorescent Pigment	B	*		BV11:1, AB83
W175, 375	Bright Violet	Fluorescent Pigment	B	*		BV7, BV15
W047, 247	Brilliant Orange	Diketo Pyrrolo Pyrrol, Benzimidazolone Pigment	C	***		PO73, PO62
W025, 225	Brilliant Pink	Quinacridone Pigment, Titanium Dioxide	A	**		PR209, PW6
W023, 223	Brown Madder	Pyranthron Pigment	E	**	59710	PR216
W134, 334	Burnt Sienna	Native Earth (Iron Oxide)	A	***	77491, 77499	PBr7
W133, 333	Burnt Umber	Native Earth (Iron-Manganese Oxide)	A	***	77491, 77499, 77727	PBr7
W070, 270	Cadmium Green Deep	Cadmium Sulfide, Hydrous Chromium Sesquioxide Polychloro Copper Phthalocyanine	C	***	77199, 77289, 74260	PY37, PG7, PG18
W069, 269	Cadmium Green Pale	Cadmium Sulfide, Hydrous Chromium Sesquioxide	C	***	77199, 77289	PY37, PG18
W015, 215	Cadmium Red Deep	Cadmium Sulfo-Selenide	E	***	77202	PR108
W014, 214	Cadmium Red Light	Cadmium Sulfo-Selenide	E	***	77202	PR108
W016, 216	Cadmium Red Orange	Cadmium Sulfo-Selenide	E	***	77202	PR108
W017, 217	Cadmium Red Purple	Cadmium Sulfo-Selenide	E	***	77202	PR108
W043, 243	Cadmium Yellow Deep	Cadmium Sulfide, Cadmium Sulfo-Selenide	C	***	77199, 77196, 77202	PO20, PY37
W040, 240	Cadmium Yellow Lemon	Cadmium Sulfide	C	***	77199	PY37
W042, 242	Cadmium Yellow Light	Cadmium Sulfide	C	***	77199	PY37
W044, 244	Cadmium Yellow Orange	Cadmium Sulfo-Selenide	C	***	77202	PR108
W041, 241	Cadmium Yellow Pale	Cadmium Sulfide	C	***	77199	PY37
W011, 211	Carmine	Alizarin Lake	A	***	58000	PR83
W092, 292	Cerulean Blue	Cobalt Stannate	D	***	77368	PB35
W024, 224	Cherry Red	Quinacridone Pigment	C	***		PR209
W002, 201	Chinese White	Titanium Dioxide	A	***	77891	PW6
W090, 290	Cobalt Blue	Cobalt Aluminate	D	***	77346	PB28
W091, 291	Cobalt Blue Hue	Complex of Silica, Alumina, Soda & Sulphur; Copper Phthalocyanine	A	***	77007, 74160	PB15, PB29
W063, 263	Cobalt Green	Hydrous Chromium Sesquioxide, Cobalt Aluminate, Titanium Dioxide	D	***	77289, 77346, 77891	PG18, PB28, PW6
W076, 276	Cobalt Green Yellow Shade	Cobalt-Titanium-Nickel-Zinc Oxide	D	***		PG50
W106, 306	Cobalt Turquoise Light	Cobalt-Aluminum-Titanium Dioxide	D	***		PB28
W110, 310	Cobalt Violet Light	Cobalt Phosphate	F	***	77360	PV14
W096, 296	Compose Blue	Copper Phthalocyanine, Titanium Dioxide	A	*	74160, 77891	PB15, PW6
W071, 271	Compose Green #1	Monoazo Pigment, Titanium Dioxide, Polychloro Copper Phthalocyanine	A	*	11710, 77891, 74260	PY3, PG7, PW6
W072, 272	Compose Green #2	Monoazo Pigment, Titanium Dioxide, Polychloro Copper Phthalocyanine	A	*	11710, 77891, 74260	PY3, PG7, PW6
W073, 273	Compose Green #3	Nitroso, Monoazo, Disazo Pigments	A	**	10006, 11710, 21095	PY3, PY14, PG8
W010, 210	Crimson Lake	Monoazo Pigment	A	**	12355	PR23
W155, 355	Davy's Grey	Native Earth (Iron-Manganese Oxide-Hydroxide), Carbon, Titanium Dioxide	A	**	77491, 77492, 77499, 77727, 77730, 77266, 77891	PBr7, PBk6, PW6
W064, 264	Emerald Green Nova	Monoazo Pigment, Titanium Dioxide Polychloro Copper Phthalocyanine	B	**	11710, 77891, 74260	PY3, PG7, PW6
W048, 248	Gamboge Nova	Nickel Complex, Benzimidazolone Pigment	B	**		PY153, PY154
W190, 390	Gold	Titanated Mica	C	***		PW20
W152, 352	Green Grey	Anhydrous Chromium Sesquioxide, Native Green Earth, Carbon	A	**	77288 77009, 77266	PG17, PG23, PBk6
W046, 246	Greenish Yellow	Pigment Dye Copper Complex	C	**		PY117
W153, 353	Grey of Grey	Condensed Anilin Pigment, Titanium Dioxide	A	**	50440, 77891	PBk1, PW6
W062, 262	Hooker's Green	Disazo Pigment, Polychloro-Bromo Copper Phthalocyanine	B	**	21108, 74265	PG83, PG36
W104, 304	Horizon Blue	Phthalocyanine, Polychloro Copper Phthalocyanine, Titanium Dioxide	A	**		PB15, PG7, PW6
W135, 335	Indian Red	Iron Oxide	A	***	77491	PR101
W045, 245	Indian Yellow	Condensed Azo Pigment, Disazo Pigment	C	**	21108	PY83, PY95
W098, 298	Indigo	Potassium Ferric-Ferrocyanide, Carbon	A	**	77510, 77266	PB27, PBk6
W138, 338	Ivory Black	Carbon, Calcium Phosphate	A	***	77267	PBk9
W031, 231	Jaune Brillant #1	Cadmium Sulfide, Cadmium Sulfo-Selenide, Titanium Dioxide	A	**	77199, 77202, 77891	PO20, PY37, PW6

HOLBEIN ARTIST WATERCOLOR – 5 & 15ml (cont.)

Ref No.	Color Name	Chemical Name		Perm Rating	Color Index Number	Color Index Name
W032, 232	Jaune Brillant #2	Cadmium Sulfo-Selenide, Titanium Dioxide, Cadmium Sulfo-Selenide	A	**	77202, 77891, 77196, 77202	PR108, PO20, PW6
W140, 340	Lamp Black	Carbon	A	***	77266	PBk6
W116, 316	Lavender	Complex of Silica, Alumina, Soda & Sulphur; Titanium Dioxide	A	**		PV15, PB29, PW6
W077, 277	Leaf Green	Benzimidazolone, Polychloro Copper Phthalocyanine	B	**		PY154, PG7
W033, 233	Lemon Yellow	Monoazo Pigment, Titanium Dioxide	A	**	11710, 77891	PY3, PW6
W130, 330	Light Red	Iron Oxide	A	***	77491	PR101
W117, 317	Lilac	Quinacridone Pigment, Dioxazine Pigment, Titanium Dioxide	A	**		PR122, PV23, PW6
W105, 305	Manganese Blue Nova		B	***		PB15
W102, 302	Marine Blue	Phthalocyanine	C	***		PB16
W113, 313	Mars Violet	Native Earth, Iron Oxide, Dioxazine Pigment	B	**	77491, 77499, 51319	PR101, PV23, PB7
W128, 328	Mars Yellow	Iron Zinc Oxide	A	***		PY119
W112, 312	Mineral Violet	Complex of Silica, Alumina, Soda & Sulphur	B	**	77007	PV15
W030, 230	Naples Yellow	Cadmium Sulfide, Hydrous Iron Oxide, Cadmium Sulfo-Selenide, Titanium Dioxide	A	***	77199, 77492, 77196, 77202, 77891	PY37, PY42, PW6
W157, 357	Neutral Tint	Monoazo Pigment, Carbon, Complex of Silica, Alumina, Soda & Sulphur	A	**	12355, 77266, 77007	PR23, PB29, PBk6
W074, 274	Olive Green	Polychloro-Bromo Copper Phthalocyanine, Disazo Pigment	A	**	74265, 21105	PY17, PG36
W013, 213	Opera	Fluorescent Pigment, Quinacridone Pigment	B	*	45170, 73915	PR122, BV10
W156, 356	Paynes Grey	Alizarin Lake, Carbon, Complex of Silica, Alumina, Soda & Sulphur; Potassium Ferric-Ferrocyanide	A	**	58000, 77266, 77007, 77510	PR83, PB27, PB29, PBk7
W137, 337	Peach Black	Condensed Anilin Pigment, Carbon	A	***	50440, 77266	PBk1, PBk6
W101, 301	Peacock Blue	Trisulfonated Copper Phthalocyanine Lake	A	**	74200	PB17
W009, 209	Permanent Alizarin Crimson	Quinacridone/Diketo, Pyrrolo Pyrrol, Titanium Dioxide	C	***		-
W066, 266	Permanent Green #1	Polychloro Copper Phthalocyanine, Nickel-Antimony Titanate, Monoazo Pigment	A	**	74260, 77788, 11680	PY1, PY53, PG7
W067, 267	Permanent Green #2	Nickel-Antimony Titanate, Monoazo Pigment, Polychloro Copper Phthalocyanine	A	**	77788, 21095, 74260	PY14, PY53, PG7
W068, 268	Permanent Green #3	Nickel-Antimony Titanate, Monoazo Pigment, Copper Phthalocyanine	A	**	77788, 11710, 74160	PY3, PY53, PB15
W114, 314	Permanent Magenta	Quinacridone Pigment	B	**	46500	PV19
W021, 221	Permanent Red	Monoazo Pigment	B	**	12370	PR112
W020, 220	Permanent Rose	Disazo Lake	B	**	16105	PR60
W115, 315	Permanent Violet	Dioxazine Pigment	B	**	51319	PV23
W037, 237	Permanent Yellow Deep	Nickel-Antimony Titanate	A	**	77788	PY53, PY55
W035, 235	Permanent Yellow Lemon	Nickel-Antimony Titanate, Monoazo Pigment	A	**	77788, 11710	PY3, PY53
W036, 236	Permanent Yellow Light	Nickel-Antimony Titanate, Disazo Pigment	A	**	77788, 21096	PY53, PY55
W038, 238	Permanent Yellow Orange	Nickel-Antimony Titanate, Disazo Pigment	A	**	77788, 21096	PY53, PY55
W097, 297	Prussian Blue	Potassium Ferric-Ferrocyanide	A	**	77510	PB27
W132, 332	Raw Sienna	Native Earth (Hydrous Iron Oxide)	A	***	77492	PY43
W131, 331	Raw Umber	Native Earth (Iron-Manganese Oxide-Hydroxide)	A	***	77491, 77492, 77499, 77727, 77730	PBr7
W012, 212	Rose Madder	Alizarin Lake	A	***	58000	PR83
W118, 318	Rose Violet	Quinacridone Pigment	C	***		PR122
W103, 303	Royal Blue	Indanthrone	C	***		PB60
W075, 275	Sap Green	Polychloro-Bromo Copper Phthalocyanine, Disazo Pigment, Nitroso Pigment	B	**	74265, 10006	PY17, PG8, PG36
W022, 222	Scarlet Lake	Monoazo Lake	B	**	15865	PR48
W136, 336	Sepia	Native Earth (Iron Oxide), Carbon	A	***	77491, 77499, 77266	PBr7, PBk6
W079, 279	Shadow Green	Perylene Pigment	D	***		PBk31
W026, 226	Shell Pink	Diketo Pyrrolo Pyrrol, Titanium Dioxide	A	**		PO73, PW6
W191, 391	Silver	Titanated Mica	C	***		PW20
W065, 265	Terre Verte	Native Green Earth, Anhydrous Chromium Sesquioxide	A	***	77009, 77288	PG17, PG23
W003, 203	Titanium White	Titanium Dioxide	A	***		PW6
W099, 299	Turquoise Blue	Trisulfonated Copper Phthalocyanine Lake, Monoazo Pigment, Titanium Dioxide, Polychloro Copper Phthalocyanine	B	**	74200, 11710, 77891, 74260	PY3, PG7, PB17, PW6
W094, 294	Ultramarine Deep	Complex of Silica, Alumina, Soda & Sulphur	A	***	77007	PB29

W093, 293	Ultramarine Light	Complex of Silica, Alumina, Soda & Sulphur	A	***	77007	PB29
W129, 329	Umber	Native Earth (Iron-Manganese-Oxide-Hydroxide)	A	***		PBr7
W139, 339	Vandyke Brown	Native Bituminous Earth	A	**	77727, 77730	NBr8
W095, 295	Verditer Blue	Cobalt Aluminate, Titanium Dioxide	A	**	77346, 77891	PB28, PW6
W018, 218	Vermilion	Cadmium Sulfo-Selenide,	F	***	77202	PR108
W019, 219	Vermilion Hue	Monoazo Lake, Disazo Pigment, Barium Sulfate, Monoazo Pigment	A	*	15865, 77120, 12370	PR48, PR112, PY81
W154, 354	Violet Grey	Thioindigo Pigment, Titanium Dioxide	A	*	73312, 77891	PR88, PW6
W061, 261	Viridian Hue	Polychloro Copper Phthalocyanine	A	***	74260	PG7
W060, 260	Viridian	Hydrous Chromium Sesquioxide	C	***	77289	PG18
W151, 351	Yellow Grey	Hydrous Iron Oxide, Carbon, Calcium Phosphate, Titanium Dioxide	A	***	77492, 77267 77891	PY42, PBk9, PW6
W034, 234	Yellow Ochre	Hydrous Iron Oxide	A	***	77492	PY42

HOLBEIN "IRODORI" ARTIST ANTIQUE WATERCOLOR

Ref No.	Color Name	Chemical Name	Series	Perm Rating	Color Index Number	Color Index Name
032	Antique Amber	Ferric-Magnesium Oxide, Disazo Pigment	A	***	77495, 21108	PBr11, PY83
039	Antique Bamboo	Polychloro Copper Phthalocyanine, Titanium Dioxide	A	**	74260, 77891	PG7, PW6
023	Antique Black	Carbon	A	***	77266	PBk6
031	Antique Bright Yellow	Nickel - Antimony Titanate, Native Ochre	A	***	77788, 77492	PY53, PY43
020	Antique Bronze Blue	Copper Phthalocyanine	A	**	73915	PB15:02
009	Antique Brown	Hydrous Iron Oxide, Iron Oxide	A	***	77491, 77491	PY42, PBr7
027	Antique Coral Red	Monoazo Pigment, Titanium Dioxide	A	**	11780, 77891	PO36, PW6
001	Antique Crimson	Alizarin Lake	A	**	58000	PR83 (Red)
035	Antique Cypress Bark	Native Earth (Iron - Manganese Oxide)	A	***	77491, 77499, 77727	PBr7
030	Antique Dandelion	Monoazo Pigment, Hydrous Iron Oxide	A	**	11710, 77492	PY3, PY42
015	Antique Dark Green	Nitroso Pigment, Hydrous Iron Oxide	A	**	10006, 77492	PG8, PY42
025	Antique Deep Red	Monoazo Pigment	A	**	12370	PR112
016	Antique Elm Green	Nitroso Pigment, Hydrous Iron Oxide	A	**	77007, 77891	PG8, PY42
048	Antique Gold	Titanated Mica	C	***	77019	
038	Antique Green Oxide	Polychloro Copper Phthalocyanine, Monoazo Pigment	A	**	74260, 11710	PG7, PY3
010	Antique Grey Brown	Iron Oxide, Iron Oxide	A	***	74260, 21095	PBr6, PBr7
014	Antique Jasper Green	Polychloro Copper Phthalocyanine	A	***	77492	PG7
028	Antique Jaune Brilliant	Monoazo Pigment, Titanium Dioxide	A	**	11780, 77891	PO36, PW6
007	Antique Lemon	Monoazo Pigment	A	**	11710	PY3
022	Antique Magenta	Quinacridone Pigment, Dioxazine Pigment	A	**	73915, 51319	PR122, PV23
008	Antique Ochre	Hydrous Iron Oxide, Hydrous Iron Oxide	A	***	77492, 77491	PY42, PY43
040	Antique Olive Green	Disazo Pigment, Nitroso Pigment	A	**	21105, 10006	PY17, PG8
013	Antique Opal Green	Polychloro Copper Phthalocyanine, Titanium dioxide	A	**	74260, 10006	PG7, PW6
004	Antique Orange	Pyrazolone Pigment, Monoazo Pigment	A	**	21115, 11680	PO34, PY1
029	Antique Orange Yellow	Disazo Pigment	A	**	21108	PY83
017	Antique Pale Blue	Complex of Silica, Alumina, Soda & Sulphur; Titanium Dioxide	A	***	77007, 74200	PB29, PW6
043	Antique Peacock Blue	Copper Phthalocyanine, Monoazo Pigment	A	***	74160, 11710	PB15, PY3
003	Antique Pink	Quinacridone Pigment, Monoazo Lake	A	**	46500, 15865:2	PV19, PR48:02:00
042	Antique Pompadour	Complex of Silica, Alumina, Soda & Sulphur; Titanium Dioxide	A	***	77007, 77891	PB29, PW6
002	Antique Purple Red	Monoazo Lake	A	**	12475	PR170
033	Antique Red Ochre	Iron Oxide	A	***	77491	PR101
005	Antique Red Orange	Monoazo Lake, Monoazo Pigment	A	**	15865, 12370	PR48:01:00, PR112
026	Antique Rose	Monoazo Pigment, Titanium Dioxide	A	**	12370, 77891	PR112, PW6
034	Antique Russet Brown	Iron Oxide	A	***	77491	PR101

HOLBEIN "IRODORI" ARTIST ANTIQUE WATERCOLOR (cont.)

Ref No.	Color Name	Chemical Name	Series	Perm Rating	Color Index Number	Color Index Name
037	Antique Seedling	Polychloro Copper Phthalocyanine, Monoazo Pigment	A	**	74260, 11710	PG7, PY3
047	Antique Silver	Titanated Mica	C	***	77019	
046	Antique Silver Grey	Carbon, Titanium Dioxide	A	***	77266, 77891	PBk6, PW6
041	Antique Sky Blue	Copper Phthalocyanine, Titanium Dioxide	A	***	74160, 77891	PB15, PW6
036	Antique Smoked Bamboo	Native Earth (Iron - Manganese Oxide -Hydroxide)	A	***	77491, 77492, 77499, 77727, 77730	PBr7
011	Antique Spring Green	Polychloro Copper Phthalocyanine, Disazo Pigment	A	**	74260, 77492	PG7, PY14
006	Antique Sun Yellow	Monoazo Pigment, Disazo Pigment	A	**	11680, 21108	PY1, PY83
019	Antique Turquoise	Trisulfonated Copper Phthalocyanine Lake	A	**	51319	PB17
045	Antique Tyrian Purple	Dioxazine Pigment, Thioindigo Pigment	A	***	-, 73312	PV37, PR88
018	Antique Ultramarine	Complex of Silica, Alumina, Soda & Sulphur Pigment, Carbon, Titanium Dioxide	A	***	74160	PB29
021	Antique Violet	Dioxazine Pigment	A	**	51319	PV23
044	Antique Violet Blue	Dioxazine Pigment, Titanium Dioxide	A	***	51319, 77891	PV23, PW6
024	Antique White	Titanium Dioxide	A	***	77891	PW6
012	Antique Yellow Green	Polychloro Copper Phthalocyanine, Hydrous Iron Oxide	A	**	74260, 77891	PG7, PY42

HOLBEIN ARTIST'S DESIGNER GOUACHE

Ref No.	Color Name	Chemical Name	Series	Perm Rating	Color Index Number	Color Index Name	Munsell Rating
G501	Alizarin Crimson	Alizarin Lake	C	**	58000	PR83	3.5R 2.5/6
G570	Aqua Blue	Copper Phthalocyanine, Titanium Dioxide	A	**	74160, 77891	PB15, PW6	9.0B 7.0/8.0
G574	Ash Blue	Complex of Silica, Alumina, Soda & Sulphur; Dioxazine Pigment, Carbon, Titanium Dioxide	A	*	77007, 51319, 77266, 77891	PB29, PV23, PBk7, PW6	4.5PB 4.5/4.0
G555	Ash Green	Polychloro Copper Phthalocyanine, Hydrous Iron Oxide, Carbon, Titanium Dioxide	A	**	74260, 77492, 77266, 77891	PG7, PY42, PBk7, PW6	9.0G 5.5/2.5
G580	Blue Violet	Fluorescent Pigment	B		42535	BV1	9.5PB 2/12.5
G644	Brilliant Gold	Titanated Mica	D	***	77019, 77891	PW20, PW6	-
G508	Brilliant Orange	Fluorescent Pigment, Pyrazolone Pigment	A	*	21110	PO13	7.5R 5/14.5
G510	Brilliant Pink	Quinacridone Pigment, Titanium Dioxide	B	*	73905, 77891	PR209, PW6	7.0RP 7.0/9.5
G646	Brilliant Silver	Titanated Mica	D	**	77019, 77891	PW20, PW6	-
G603	Burnt Sienna	Native Earth (Iron Oxide), Cadmium Sulfo-Selenide, Iron Oxide, Organic Pigment	A	***	77491, 77499, 77196, 77491	PR108, PBr7	9.5R 4/6
G604	Burnt Umber	Native Earth (Iron-Manganese Oxide)	A	***	77491, 77499, 77727	PBr7	1YR 3/1.5
G543	Cadmium Green	Cadmium Sulfide, Barium Sulfate, Trisulfonated Copper Phthalocyanine Lake, Monoazo Pigment	D	***	77117, 74200, 11710	PY3, PY35, PG7	2.5G 4.5/10
G552	Cadmium Green Deep	Trisulfonated Copper Phthalocyanine Lake, Monoazo Pigment, Cadmium Sulfide, Barium Sulfate	D	***	74200, 11710, 77117	PY3, PY35, PG7	5G 3.5/6.5
G544	Cadmium Green Pale	Cadmium Sulfide, Barium Sulfate, Trisulfonated Copper Phthalocyanine Lake, Monoazo Pigment	D	***	77117, 74200, 11710	PY3, PY35, PG7	7GY 7/10
G504	Cadmium Red	Cadmium-Mercury Sulfide	E	***	77201	PR108	7R 5/14.5
G505	Cadmium Red Deep	Cadmium-Mercury Sulfide	E	***	77201	PR108	4.5R 4.5/13
G506	Cadmium Red Purple	Cadmium-Mercury Sulfide	E	***	77201	PR108	3.5R 4/10.5
G523	Cadmium Yellow	Cadmium Sulfide, Barium Sulfate	D	***	77117	PY35	1.5Y 8/13
G524	Cadmium Yellow Lemon	Cadmium Sulfide, Barium Sulfate	D	***	77117	PY35	8Y 9/10.5
G525	Cadmium Yellow Orange	Cadmium-Mercury Sulfide	D	***	77201	PR108	0.5YR 6/14
G502	Carmine	Monoazo Pigment	B	**	12490	PR5	5R 3.5/11
G562	Cerulean Blue	Cobalt Stannate	G	***	77368	PB35	1.5PB 5/10
G605	Chinese Orange	Cadmium Sulfo-Selenide, Iron Oxide, Organic Pigment	C	**	77196, 77491	PO20, PBr6	7R 4.5/9.5
G563	Cobalt Blue	Cobalt Aluminate	D	***	77346	PB28	5.5PB 4.5/13
G551	Cobalt Green Pale	Hydrous Chromium Sesquioxide Cobalt Aluminate, Titanium Dioxide	E	**	77289, 77346, 77891	PG18, PB28, PW6	5PG 5.5/6.5

HOLBEIN ARTIST'S DESIGNER GOUACHE (cont.)

Ref No.	Color Name	Chemical Name		Perm Rating	Color Index Number	Color Index Name	Munsell Rating
G569	Cobalt Turquoise	Cobalt Aluminate Blue Spinel	D	***	77346	PB28	10.0BG 6.5/9.5
G583	Cobalt Violet	Cobalt Phosphate	G	***	77360	PV49, PB29	3.5P 4/14
G547	Cyprus Green	Monoazo Pigment, Polychloro Copper Phthalocyanine, Trisulfonated Copper Phthalocyanine Lake	A	**	11710, 74260, 74200	PY3, PG7, PB15	4.5BG 4.5/9.5
G548	Dark Green	Polychloro-Bromo Copper Phthalocyanine, Potassium Ferric-Ferrocyanide	A	***	74265, 77510	PG36, PB27	4BG 3/3
G545	Emerald Green	Monoazo Pigment, Polychloro Copper Phthalocyanine	A	**	11710, 74260	PY3, PG7	4.5G 5.5/11
G507	Flame Red	Monoazo Pigment	A	**	12460	PR9	6.5R 4.5/14
G503	Geranium (Primary)	Disazo Lake	A	*	16105	PR60	3R 4/13
G620	Grey No. 1	Carbon, Ferric-Magnesium Oxide, Titanium Dioxide	A	**	77266, 77495, 77891	PBr11, PBk7, PW6	N=8
G621	Grey No. 2	Carbon, Hydrous Iron Oxide, Iron Oxide Titanium Dioxide	A	**	77266, 77492, 77491, 77891	PR101, PY42, PBk7, PW6	N=6.5
G622	Grey No. 3	Carbon, Titanium Dioxide, Native Earth (Iron-Manganese Oxide)	A	**	77266, 77891, 77491, 77499, 77727	PBr7, PBk7, PW6	N=4
G560	Ice Blue	Trisulfonated Copper Phthalocyanine Lake, Monoazo Pigment, Polychloro Copper Phthalocyanine	A	**	74200, 11710, 74260	PY3, PG7, PB15	7.5BG 4/9
G586	Iris	Dioxazine Pigment, Fluorescent Pigment, Fluorescent Pigment, Complex of Silica, Alumina, Soda & Sulphur	B	*	51319, 48020, 45174, 77007	PV23, BV7, BV15, PB29	1.0P 2.5/12.0
G606	Ivory Black	Carbon	A	***	77266	PBk7	N=2
G530	Jaune Brillant No. 1	Titanium Dioxide, Cadmium Sulfide, Cadmium Sulfo-Selenide	C	***	77891, 77199, 77202	PO20, PY37, PW6	2.5YR 8/6.5
G531	Jaune Brillant No. 2	Cadmium Sulfo-Selenide, Hydrous Iron Oxide, Titanium Dioxide	C	***	77202, 77492, 77891	PO20, PY42, PW6	3YR, 7/10
G607	Jet Black	Condensed Anilin Pigment	A	**	50440	PBk1	N=1.5
G568	Katsura Blue	Trisulfonated Copper Phthalocyanine Lake	B	**	74200	PB17	5PB 3/9.5
G540	Leaf Green	Monoazo Pigment, Polychloro Copper Phthalocyanine, Monoazo Pigment	A	**	11710, 74260, 11680	PY1, PY3, PG7	4GY 8/10.5
G526	Lemon Yellow (Primary)	Monoazo Pigment	A	**	11710	PY3	8Y 9/12
G587	Lilac	Dioxazine Pigment, Titanium Dioxide	B	*	51319, 77891	PV23, PW6	1.0P 6.0/9.0
G582	Magenta	Fluorescent Pigment	B		45174	BV15	7.5P 3.5/16.5
G532	Marigold	Disazo Pigment	C	**	21108	PY83	7.0YR 7.5/12.5
G553	Moss Green	Hydrous Iron Oxide, Nitroso Pigment	A	**	77492, 10006	PY42, PG8	1.5GY 5.0/4.0
G528	Naples Yellow	Titanium Dioxide, Hydrous Iron Oxide, Cadmium Sulfide, Barium Sulfate	C	***	77891, 77492, 77117	PY35, PY42, PW6	1.5Y 7.5/7.5
G529	Naples Yellow Italian	Cadmium Sulfide, Hydrous Iron Oxide, Titanium Dioxide	C	***	77199, 77492, 77891	PY37, PY42, PW6	8YR 7.5/7
G572	Navy Blue	Complex of Silica, Alumina, Soda & Sulphur; Polychloro Copper Phthalocyanine	A	**	77007, 74260	PB29, PG7	0.5PB 2.5/5.0
G546	Olive Green	Nitroso Pigment, Monoazo Pigment	B	**	10006, 11680	PY1, PG8	6.5GY 4/5.5
G584	Opera	Fluorescent Pigment	B		48020, 45175, 45160	BR1, BV1, BV11	6RP 4.5/17
G567	Peacock Blue	Trisulfonated Copper Phthalocyanine Lake	A	**	74200	PB15, PG7	8.5B 4/10
G642	Pearl Copper	Titanated Mica	C	**	77019	PW20	-
G641	Pearl Gold	Titanated Mica	C	**	77019	PW20	-
G640	Pearl White	Titanated Mica	C	**	77019	PW20	-
G542	Permanent Green Deep	Trisulfonated Copper Phthalocyanine Lake, Monoazo Pigment, Monoazo Pigment, Polychloro Copper Phthalocyanine	A	**	74200, 11710, 11710, 74260	PY3, PG7	0.5BG 4/10
G541	Permanent Green Light	Monoazo Pigment, Polychloro Copper Phthalocyanine	A	**	11710, 74260	PY3, PG7	0.5G 6.5/11.5
G630	Permanent White	Titanium Dioxide	A	***	77891	PW6	N=9.5
G520	Permanent Yellow	Monoazo Pigment	A	**	11680	PY1	2.5Y 8.5/13
G521	Permanent Yellow Deep	Monoazo Pigment	A	**	11680	PY1	7.5Y 7.5/13
G522	Permanent Yellow Orange	Monoazo Pigment	A	**	11690	PY6	3YR 7/14
G589	Pink	Fluorescent Pigment, Titanium Dioxide	B	*	45170, 77891	BV10, PW6	1.0RP 7.0/13.0
G566	Prussian Blue	Pottasium Ferric-Ferrocyanide	A	**	77510	PB27	7PB 2/6.5
G571	Pure Blue (Primary Blue)	Trisulfonated Copper Phthalocyanine Lake, Calcium Carbonate	A	**	74200	PB17	3.5PB 4.0/11.5
G509	Pure Red	Monoazo Lake	C	**	12475	PR170	5.0R 4.5/13.0
G601	Raw Sienna	Native Earth (Hydrous Iron Oxide)	A	***	77492	PY43	5.5YR 5/6.5
G602	Raw Umber	Native Earth (Iron-Manganese Oxide-Hydroxide)	A	***	77491, 77492, 77499, 77727, 77730	PBr7	0.5Y 4.5/2.5
G643	Rich Gold	Titanated Mica	C	***	77019, 77891	PW20, PW6	-
G585	Rose	Fluorescent Pigment	B		48020, 45175, 45160	BR1, BV7, BV11	3RP 4.5/16.5
G588	Rose Violet	Quinacridone Pigment	C	**	73915	PR122	5.5RP 3.5/10.0

HOLBEIN ARTIST'S DESIGNER GOUACHE (cont.)

Ref No.	Color Name	Chemical Name	Series	Perm Rating	Color Index Number	Color Index Name	Munsell Rating
G600	Sepia	Iron-Manganese Oxide, Carbon	A	***	77491, 77499, 77727, 77266	PBr6, PBk7	1.5YR 2.5/1.0
G645	Silver	Titanated Mica	C	**	77019, 77891	PW20, PW6	-
G573	Smalt Blue	Complex of Silica, Alumina, Soda & Sulphur; Dioxazine Pigment, Titanium Dioxide	A	*	77007, 51319, 77891	PB29, PV23, PW6	6.5PB 5.0/12.5
G550	Terre Verte	Native Green Earth, Anhydrous Chromium Sesquioxide	A	***	77009, 77288	PG17, PG23	0.5G 4/3
G561	Turquoise Blue	Barium Mangan-Sulfate, Trisulfonated Copper Phthalocyanine Lake	B	**	77112, 74200	PB15, PB35, PG7, PW6	8B 4.5/10
G554	Turquoise Green	Polychloro Copper Phthalocyanine, Titanium Dioxide	A	**	74260, 77891	PG7, PW6	2.0BG 6.5/8.0
G565	Ultramarine Deep	Complex of Silica, Alumina, Soda & Sulphur	A	***	77007	PB29	7PB 3/15.5
G564	Ultramarine Light	Complex of Silica, Alumina, Soda & Sulphur	A	***	77007	PB29	7PB 3.5/16.5
G581	Violet	Fluorescent Pigment	B	-	45174	BV15	3P 3/15
G549	Viridian	Hydrous Chromium Sesquioxide	C	***	77289	PG18	1BG 4/7
G527	Yellow Ochre	Hydrous Iron Oxide, Native Earth (Hydrous Iron Oxide)	A	***	77492, 77492	PY42, PY43	8.5YR 6/7.5
G631	Zinc White	Zinc Sulfide, Barium Sulfate	A	**	77115	PW5	N=9.5

HOLBEIN "ACRYLA" ACRYLIC DESIGNER GOUACHE

Ref No.	Color Name	Chemical Name	Series	Perm Rating	Color Index Number	Color Index Name	Munsell Rating
D099	Aqua Blue	Copper Phthalocyanine, Titanium Dioxide	A	***	74160, 77891	PB15:3, PW6	9.0B 7.0/8.0
D158	Ash Blue	Complex of Silica, Alumina, Soda & Sulphur; Carbon, Titanium Dioxide	A	**	77007, 77266, 77891	PB29, PBk7, PW6	3.0PB 4.5/4.0
D157	Ash Green	Hydrous Iron Oxide, Polychloro Copper Phthalocyanine, Carbon, Titanium Dioxide	A	***	77492, 74260, 77266, 77891	PG7, PY42, PBk7, PW6	8.5G 5.5/2.5
D155	Ash Rose	Iron Oxide, Carbon, Titanium Dioxide	A	***	77491, 77266, 77891	PR101, PBk7, PW6	8.0R 5.5/3.0
D156	Ash Yellow	Hydrous Iron Oxide, Carbon, Titanium Dioxide	A	***	77492, 77266, 77891	PY42, PBk7, PW6	3.0Y 6.0/3.5
D043	Beige	Hydrous Iron Oxide, Iron-Manganese Oxide (Native Earth), Titanium Dioxide	A	****	77492, 77491, 77499, 77727, 77891	PY42, PBr6, PW6	2.0Y 8.5/2.5
D072	Blue Green	Polychloro Copper Phthalocyanine, Copper Phthalocyanine, Titanium Dioxide	A	***	74260, 74160, 77891	PG7, PB15:3, PW6	5.0BG 4.0/8.0
D114	Blue Violet	Fluorescent Pigment	A	-	42535	BV1	9.0PB 2.5/12.5
D173	Bronze	Titanated Mica	C	***	77019	PW20	-
D131	Burnt Sienna	Iron Oxide	A	****	77491	PR101	10.0R 4.0/7.5
D133	Burnt Umber	Iron-Manganese Oxide (Native Earth)	A	****	77491, 77499, 77727	PBr6	5.0YR 3.0/2.0
D002	Carmine	Monoazo Pigment	A	**	12475	PR170	4.0R 4.0/13.0
D094	Cerulean Blue	Copper Phthalocyanine, Titanium Dioxide	A	***	74160, 77891	PB15:3, PW6	2.0PB 4.5/11.0
D152	Chinese White	Titanium Dioxide	A	****	77891	PW6	V 9.0
D093	Cobalt Blue	Copper Phthalocyanine	A	***	74160	PB15:3	3.0PB 3.5/10.5
D068	Cobalt Green	Polychloro Copper Phthalocyanine, Monoazo Pigment, Titanium Dioxide	A	**	74260, 11710, 77891	PY3, PG7, PW6	3.0G 5.0/10.5
D010	Coral Red	Monoazo Pigment, Pyrazolone Pigment, Titanium Dioxide	A	**	12460, 21110, 77891	PR9, PO13, PW6	5.0R 6.5/10.5
D008	Cosmos Pink	Quinacridone Pigment, Monoazo Pigment, Titanium Dioxide	A	**	73915, 12485, 77891	PR122, PR146, PW6	4.0RP 5.5/11.0
D037	Cream Yellow	Monoazo Pigment, Titanium Dioxide	A	**	11680, 77891	PY1, PW6	5.0Y 9.0/6.5
D001	Crimson (Primary)	Monoazo Pigment, Quinacridone Pigment	A	**	12487, 73915	PR122, PR184	10.0RP 3.5/10.5
D063	Deep Green	Disazo Pigment, Polychloro Copper Phthalocyanine	A	**	21108, 74260	PY83, PG7	3.0G 3.5/5.5
D117	Deep Magenta	Thioindigo Pigment	A	**	73312	PR88	6.0RP 2.5/5.5
D112	Deep Violet	Dioxazine Pigment	A	***	51319	PV23	9.0PB 2.0/5.0
D033	Deep Yellow	Disazo Pigment	A	**	21108	PY83	8.0YR 8.0/13.5
D067	Emerald Green	Polychloro Copper Phthalocyanine, Monoazo Pigment, Titanium Dioxide	A	**	74260, 11710, 77891	PY3, PG7, PW6	5.0G 6.0/9.5

HOLBEIN "ACRYLA" ACRYLIC DESIGNER GOUACHE (cont.)

Ref No.	Color Name	Chemical Name		Perm Rating	Color Index Number	Color Index Name	Munsell Rating
D041	Flesh	Benzimidazolone, Nickel-Antimony Titanate, Titanium Dioxide	A	**	11780, 77788, 77891	PO36, PY53, PW6	8.0YR 8.5/4.5
D171	Gold	Titanated Mica	C	***	77019	PW20	-
D071	Grass Green	Polychloro Copper Phthalocyanine, Monoazo Pigment, Titanium Dioxide	A	**	74260, 11710, 77891	PY3, PG7, PW6	9.0G 4.5/9.5
D061	Green	Polychloro Copper Phthalocyanine, Monoazo Pigment	A	**	74260, 11710	PY3, PG7	3.0G 4.5/10.0
D102	Horizon Blue	Copper Phthalocyanine, Titanium Dioxide, Polychloro Copper Phthalocyanine	A	***	74160, 77891, 74260	PG7, PB15:3, PW6	5.0B 7.5/7.0
D069	Ice Green	Polychloro Copper Phthalocyanine, Titanium Dioxide	A	***	74260, 77891	PG7, PW6	5.0BG 7.5/6.0
D042	Ivory White	Hydrous Iron Oxide, Titanium Dioxide, Nickel-Antimony Titanate	A	****	77492, 77891, 77788	PY42, PY53, PW6	5.0Y 9.0/2.0
D038	Jaune Brillant	Monoazo Pigment, Disazo Pigment, Titanium Dioxide	A	**	12475, 21108, 77891	PR170, PY83, PW6	3.0YR 7.5/6.5
D136	Jet Black	Condensed Anilin Pigment	A	**	50440	PBk1	V 1.5
D137	Lamp Black	Carbon	A	****	77266	PBk7	V 1.5
D070	Leaf Green	Monoazo Pigment, Polychloro Copper Phthalocyanine	A	**	11710, 74260	PY3, PG7	3.0GY 8.5/12.0
D034	Lemon Yellow (Primary)	Monoazo Pigment	A	**	11710	PY3	9.0Y 9.0/11.5
D100	Light Blue	Complex of Silica, Alumina, Soda & Sulphur; Titanium Dioxide	A	***	77007, 77891	PB29, PW6	3.0PB 6.5/9.0
D062	Light Green	Polychloro Copper Phthalocyanine, Monoazo Pigment	A	**	74260, 11710	PY3, PG7	9.0GY 6.0/13.0
D116	Light Magenta	Monoazo Pigment, Titanium Dioxide	A	**	12475, 77891	PR170, PW6	6.0RP 7.0/8.0
D134	Light Red Bright	Monoazo Pigment, Monoazo Pigment, Polychloro Copper Phthalocyanine	A	**	12460, 11710, 74260	PR9, PY3, PG7	8.0R 4.5/9.5
D032	Light Yellow	Monoazo Pigment, Titanium Dioxide	A	**	11710, 77891	PY3, PW6	5.0Y 8.5/13.0
D118	Lilac	Dioxazine Pigment, Titanium Dioxide	A	***	51319, 77891	PV23, PW6	9.0PB 6.5/7.5
D198	Luminous Green	Fluorescent Pigment, Polychloro Copper Phthalocyanine	C	-	-, 72460	SY135, SY116, SY44	-
D197	Luminous Lemon	Fluorescent Pigment	C	-	-	SY135, SY116, SY44	-
D196	Luminous Orange	Fluorescent Pigment	C	-	45174, 45160, -	BV11:1, BR1, SY135	-
D195	Luminous Red	Fluorescent Pigment	C	-	45174, 45160, -	BV11:1, BR1, SY135	-
D115	Magenta	Fluorescent Pigment	A	-	45174, 48020, -	BV11:1, BV7, BV15	1.0RP 3.5/14.0
D185	Metallic Blue	Titanated Mica, Copper Phthalocyanine	C	***	77019, 74160	PB15:3, PW20	-
D184	Metallic Green	Titanated Mica, Polychloro Copper Phthalocyanine	C	***	77019, 74260	PG7, PW20	-
D182	Metallic Red	Titanated Mica, Monoazo Pigment	C	**	77019, 12485	PR146, PW20	-
D186	Metallic Violet	Titanated Mica, Dioxazine Pigment	C	***	77019, 51319	PV23, PW20	-
D187	Metallic White	Titanated Mica	C	***	77019	PW20	-
D183	Metallic Yellow	Titanated Mica, Monoazo Pigment	C	**	77019, 11680	PY1, PW20	-
D073	Mint Green	Monoazo Pigment, Hydrous Iron Oxide, Polychloro Copper Phthalocyanine, Titanium Dioxide	A	***	11680, 77492, 74260, 77891	PY42, PY1, PG7, PW6	2.0G 7.5/5.0
D101	Misty Blue	Complex of Silica, Alumina, Soda & Sulphur; Ferroso-Ferric Oxide, Titanium Dioxide	A	***	77007, 77499, 77891	PB29, PBk11, PW6	3.0PB 8.0/2.5
D074	Misty Green	Anhydrous Chromium Sesquioxide, Hydrous Iron Oxide, Titanium Dioxide	A	****	77288, 77492, 77891	PG17, PY42, PW6	5.0GY 7.5/1.5
D044	Mustard	Monoazo Pigment, Disazo Pigment; Complex of Silica, Alumina, Soda & Sulphur	A	**	11710, 21108, 77007	PY3, PY83, PB29	4.0Y 7.5/10.0
D040	Naples Yellow	Benzimidazolone, Nickel-Antimony Titanate, Titanium Dioxide	A	**	11780, 77788, 77891	PO36, PY53, PW6	2.0Y 8.5/6.0
D098	Navy Blue	Polychloro Copper Phthalocyanine; Complex of Silica, Alumina, Soda & Sulphur	A	***	72460, 77007	PG7, PB29	3.0PB 2.5/6.5
D161	Neutral Grey #1	Titanium Dioxide, Carbon	A	****	77891, 77266	PBk7, PW6	V 8.5
D162	Neutral Grey #2	Titanium Dioxide, Carbon	A	****	77891, 77266	PBk7, PW6	V 7.5
D163	Neutral Grey #3	Titanium Dioxide, Carbon, Iron-Manganese Oxide (Native Earth)	A	****	77891, 77266, 77491, 77499, 77727	PBr6, PBk7, PW6	V 5.5
D164	Neutral Grey #4	Titanium Dioxide, Hydrous Iron Oxide, Iron-Manganese Oxide (Native Earth), Carbon	A	****	77891, 77492, 77491, 77499, 77727, 77266	PY42, PBr6, PBk7, PW6	V 4.0
D065	Olive	Disazo Pigment; Complex of Silica, Alumina, Soda & Sulphur	A	**	21108, 77007	PY83, PB29	5.0Y 5.5/6.5
D004	Opera	Fluorescent Pigment	A	-	45174, 45160	BV11:1, BR1:1	7.0RP 5.5/18.5
D035	Orange	Pyrazolone Pigment	A	**	21110	PO13	10.0R 5.5/14.0
D036	Orange Yellow	Disazo Pigment, Pyrazolone Pigment	A	**	21108, 21110	PY83, PO13	4.0YR 7.0/14.0
D104	Pale Aqua	Copper Phthalocyanine, Titanium Dioxide, Hydrous Iron Oxide	A	***	74160, 77891, 77492	PB15:3, PY42, PW6	1.0B 8.0/4.0
D181	Pale Gold	Titanated Mica	C	***	77019	PW20	-

HOLBEIN "ACRYLA" ACRYLIC DESIGNER GOUACHE (cont.)

Ref No.	Color Name	Chemical Name	Series	Perm Rating	Color Index Number	Color Index Name	Munsell Rating
D120	Pale Lavender	Complex of Silica, Alumina, Soda & Sulphur; Dioxazine Pigment, Titanium Dioxide	A	**	77007, 51319, 77891	PB29, PV23, PW6	7.0PB 8.0/5.0
D121	Pale Lilac	Quinacridone Pigment, Dioxazine Pigment, Titanium Dioxide	A	**	73915, 51319, 77891	PR122, PV23, PW6	7.0P 8.0/6.0
D075	Pale Lime	Monoazo Pigment, Polychloro Copper Phthalocyanine, Titanium Dioxide	A	**	11710, 74260, 77891	PG7, PY3, PW6	5.0GY 9.0/5.0
D076	Pale Mint	Monoazo Pigment, Polychloro Copper Phthalocyanine, Titanium Dioxide	A	**	11710, 74260, 77891	PG7, PY3, PW6	3.0G 9.0/4.0
D014	Pale Peach	Monoazo Pigment, Disazo Pigment, Titanium Dioxide	A	**	12460, 21108, 77891	PR9, PY83, PW6	3.0YR 9.0/3.0
D013	Pale Pink	Monoazo Pigment, Titanium Dioxide	A	**	12460, 77891	PR9, PW6	8.0RP 8.5/4.0
D096	Peacock Blue	Polychloro Copper Phthalocyanine, Copper Phthalocyanine, Titanium Dioxide	A	***	74260, 74160, 77891,	PG7, PB15:3, PW6	10.0BG 4.0/7.0
D005	Pink	Fluorescent Pigment, Titanium Dioxide	A	-	45174, 45160, 77891	BR1:1, BV11:1, PW6	4.0RP 7.0/15.0
D105	Prussian Blue	Complex of Silica, Alumina, Soda & Sulphur; Copper Phthalocyanine, Carbon	A	**	77007, 74160, 77266	PB29, PB15, PBK7	7PB 2.0/5.5
D009	Pure Red	Monoazo Pigment	A	**	12475	PR170	6.0R 4.0/13.0
D138	Raw Sienna	Hydrous Iron Oxide, Iron Zinc Oxide	A	****	77492, 77496	PY42, PY119	7.0YR 5.5/6.5
D132	Raw Umber	Iron-Manganese Oxide (Native Earth), Hydrous Iron Oxide, Ferroso-Ferric Oxide	A	****	77491, 77499, 77727, 77492, 77499	PY42, PBr6, PBK11	10.0YR 3.5/2.0
D113	Red Violet	Fluorescent Pigment	A	-	48020, --	BV7, BV15, AB83	7.0P 3.0/13.5
D006	Rose	Fluorescent Pigment	A	-	45174, 48020, --, 45160, --	BV11:1, BV7, BV15, Br1, SY135, SY116, AB83	6.0RP 3.5/12.5
D119	Rose Violet	Quinacridone Pigment	A	***	73915	PR122	6.0RP 3.5/11.0
D066	Sap Green	Monoazo Pigment, Disazo Pigment, Polychloro Copper Phthalocyanine	A	**	12460, 21108, 74260	PR9, PY83, PG7	6.0GY 3.5/4.5
D003	Scarlet	Monoazo Pigment	A	**	12460	PR9	7.0R 4.5/14.0
D135	Sepia	Iron Manganese Oxide (Native Earth), Carbon	A	****	77491, 77499, 77727, 77266	PBr6, PBK7	8.0YR 2.5/1.0
D011	Shell Pink	Monoazo Pigment, Benzimidazolone, Titanium Dioxide	A	**	12460, 11780, 77891	PR9, PO36, PW6	7.0R 8.5/4.5
D172	Silver	Titanated Mica	C	***	77019	PW20	-
D097	Sky Blue	Polychloro Copper Phthalocyanine, Copper Phthalocyanine	A	***	74260, 74160	PB15:3, PG7	10.0B 3.5/9.5
D103	Smalt Blue	Complex of Silica, Alumina, Soda & Sulphur; Titanium Dioxide	A	***	77007, 77891	PB29, PW6	6.0PB 5.0/12.5
D151	Titanium White	Titanium Dioxide	A	****	77891	PW6	V 9.5
D095	Turquoise Blue	Copper Phthalocyanine, Titanium Dioxide, Polychloro Copper Phthalocyanine	A	***	74160, 77891, 74260	PG7, PB15:3, PW6	5.0B 4.0/7.5
D091	Ultramarine Blue (Primary)	Complex of Silica, Alumina, Soda & Sulphur	A	***	77007	PB29	6.0PB 3.5/16.0
D092	Ultramarine Deep	Complex of Silica, Alumina, Soda & Sulphur	A	***	77007	PB29	7.0PB 2.5/16.5
D012	Vermilion	Pyrazolone Pigment, Monoazo Pigment	A	**	21110, 12460	PR9, PO13	8.0R 4.5/13.0
D111	Violet	Fluorescent Pigment	A	-	42535, 48020, --	BV1, BV7, BV15, AB83	2.0P 2.5/12.5
D064	Viridian	Polychloro Copper Phthalocyanine, Copper Phthalocyanine	A	***	74260, 74160	PG7, PB15:3	5.0BG 3.5/6.5
D007	Wine Red	Monoazo Pigment	A	**	12487	PR184	4.0R 3.0/8.0
D031	Yellow	Monoazo Pigment, Disazo Pigment, Titanium Dioxide	A	**	11710, 21108, 77891	PY3, PY83, PW6	2.0Y 8.0/13.5
D039	Yellow Ochre	Hydrous Iron Oxide	A	****	77492	PY42	10.0YR 6.5/8.0

HOLBEIN "ACRYLA" GESSO – Color & Whites

Ref No.	Color Name	Chemical Name	Series	Perm Rating	Color Index Number	Color Index Name	Munsell Rating
A734	Black	Ferroso-Ferric Oxide	D	****	77499	PBK11	V 2.5
A873	Bronze	Titanated Mica	H	****	77019	PW20	-
A867	Burnt Umber	Iron-Manganese Oxide (Native Earth)	D	****	77491, 77499, 77727	PBr6	5.0YR 2.5/1.0
A851	Carmine	Monoazo Pigment	E	**	12475, 12460	PR9, PR170	4.0R 4.0/12.0
A863	Cerulean Blue Hue	Copper Phthalocyanine, Titanium Dioxide	E	***	74160, 77891	PB15:3, PW6	1.0PB 4.5/10.0

HOLBEIN "ACRYLA" GESSO – Color & Whites (cont.)

Ref No.	Color Name	Chemical Name	Series	Perm Rating	Color Index Number	Color Index Name	Munsell Rating
A862	Cobalt Blue Hue	Complex of Silica, Alumina, Soda & Sulphur; Copper Phthalocyanine, Titanium Dioxide	E	***	77007, 74160, 77891	PB29, PB15:3, PW6	5.5PB 3.5/9.5
A875	Gold	Titanated Mica	H	****	77019	PW20	-
A858	Green	Polychloro Copper Phthalocyanine, Monoazo Pigment	E	**	74260, 11710	PY3, PG7	5.0G 3.5/7.5
A868	Grey V-5	Hydrous Iron Oxide, Iron Oxide	D	***	77492, 77491	PY42, PR101	V 5.0
A869	Grey V-7	Hydrous Iron Oxide, Iron Oxide, Carbon, Titanium Dioxide	D	***	77492, 77491, 77266, 77891	PY42, PR101, PBk7	V 7.0
A853	Jaune Brilliant	Nickel-Antimony Titanate, Titanium Dioxide, Monoazo Pigment	E	**	77788, 77891, 12460	PR9, PY53, PW6	4.5YR 7.5/7.0
A856	Lemon Yellow	Monoazo Pigment, Nickel-Antimony Titanate	E	**	11710, 77788	PY3, PY53	8.5Y 8.5/10.5
A857	Light Green	Monoazo Pigment, Nickel-Antimony Titanate, Polychloro Copper Phthalocyanine	G	**	11710, 77788, 74260	PY3, PY53, PG7	1.0G 6.0/11.5
A861	Navy Blue	Polychloro Copper Phthalocyanine, Complex of Silica, Alumina, Soda & Sulphur	E	***	74260, 77007	PG7, PB29	2.0PB 2.5/5.5
A852	Orange	Monoazo Pigment, Disazo Pigment	G	**	11780, 11710, 21104	PO36, PY3, PY170	0.5YR 6.0/12.0
A865	Raw Umber	Native Earth, Iron-Manganese Oxide, Hydrous Iron Oxide, Ferroso-Ferric Oxide	D	****	77491, 77499, 77727, 77492, 77499	PBr6, PY42, PBk11	1.0Y 3.5/2.0
A866	Red Ochre	Iron Oxide	D	****	77491	PR101	6.5R 3.5/5.5
A874	Silver	Titanated Mica	H	****	77019	PW20	-
A859	Terre Verte	Anhydrous Chromium Sesquioxide	D	****	77288	PG17	8.0GY 4.0/3.0
A864	Violet	Quinacridone Pigment, Dioxazine Pigment, Titanium Dioxide	G	***	73915, 51319, 77891	PR122, PV23, PW6	1.5P 2.5/6.0
A733	White L Coarse	Titanium Dioxide, Calcium Carbonate		****	77891, 77220	PW6, PW18	V 9.5
A737	White LL Extra Coarse	Titanium Dioxide, Calcium Carbonate		****	77891, 77220	PW6, PW18	V 9.5
A731	White M Medium	Titanium Dioxide, Calcium Carbonate		****	77891, 77220	PW6, PW18	V 9.5
A732	White S Smooth	Titanium Dioxide, Calcium Carbonate		****	77891, 77220	PW6, PW18	V 9.5
A854	Yellow	Monoazo Pigment, Disazo Pigment, Titanium Dioxide	G	**	11710, 21108, 77891	PY3, PY83, PW6	3.5Y 8.5/10.5
A855	Yellow Ochre	Hydrous Iron Oxide	D	***	77492	PY42	9.0YR 5.5/6.5

HOLBEIN "ACRYLA" ACRYLIC COLOR

Ref No.	Color Name	Chemical Name	Series	Perm Rating	Color Index Number	Color Index Name	Munsell Rating
A242	Acanthus Green	Anhydrous Chromium Sesquioxide	A	****	77288	PG17	10.0GY 4.0/4.5
A201	Alps Red	Quinacridone Pigment	C	***	46500	PV19	5.0R 3.5/12.0
A269	Aqua Blue	Copper Phthalocyanine, Titanium Dioxide	B	***	74160, 77891	PB15:3, PW6	8.0B 7.0/8.5
A248	Bamboo Green	Monoazo Pigment, Polychloro Copper Phthalocyanine	B	**	74260, 21127	PY3, PG7	8.0G 2.5/8.0
A281	Bordeaux Red	Quinacridone Pigment, Thioindigo Pigment	C	**	73312	PR122, PR88	2.5R 2.0/5.5
A209	Brilliant Pink	Monoazo Pigment, Titanium Dioxide	B	**	12460, 77891	PR9, PW6	7.5RP 6.5/9.5
A301	Burnt Sienna	Iron Oxide (Native Earth)	A	****	77491, 77499	PBr7	9.0R 3.0/4.0
A302	Burnt Umber	Iron-Manganese Oxide	A	****	77491, 77499, 77727, 77492, 77730	PBr6, PBr7	3.0YR 2.5/1.0
A245	Cadmium Green Deep	Cadmium Sulfide, Barium Sulfate, Polychloro Copper Phthalocyanine	C	***	77117, 74260	PY35, PG7	4.0G 3.0/8.5
A243	Cadmium Green Light	Cadmium Sulfide, Barium Sulfate, Polychloro Copper Phthalocyanine	C	***	77117, 74260	PY35, PG7	8.5GY 7.0/12.5
A244	Cadmium Green Middle	Cadmium Sulfide, Barium Sulfate, Polychloro Copper Phthalocyanine	C	***	77117, 74260	PY35, PG7	1.5G 5.5/13.0
A205	Cadmium Red Light	Cadmium Sulfo-Selenide	C	***	77202	PO20, PR108	7.5R 5.0/14.5
A206	Cadmium Red Middle	Cadmium Sulfo-Selenide	C	***	77202	PR108	5.0R 4.0/13.0
A207	Cadmium Red Purple	Cadmium Sulfo-Selenide	C	***	77202	PR108	4.0R 3.5/10.5
A223	Cadmium Yellow Light	Cadmium Sulfide, Barium Sulfate	C	***	77117	PY35	8.0Y 8.5/11.5
A224	Cadmium Yellow Middle	Cadmium Sulfide, Barium Sulfate	C	***	77117	PY35	0.5Y 8.0/13.5
A225	Cadmium Yellow Orange	Cadmium Sulfo-Selenide	C	***	77202	PR108, PO20	8.5R 5.5/14.5
A260	Cerulean Blue	Cobalt Stannate	D	****	77368	PB35	2.5PB 4.5/10.5

HOLBEIN ACRYLA ACRYLIC COLOR (cont.)

Ref No.	Color Name	Chemical Name		Perm Rating	Color Index Number	Color Index Name	Munsell Rating
A202	Chapel Rose	Monoazo Pigment	B	**	12485	PR146	4.5R 3.0/10.5
A261	Cobalt Blue	Cobalt Aluminate	D	****	77346	PB28	6.5PB 3.5/13.0
A246	Cobalt Green	Cobalt-Titanium-Nickel-Zinc Oxide	D	****	77335	PG19	2.0G 4.5/8.5
A267	Compose Blue # 1	Copper Phthalocyanine, Titanium Dioxide, Polychloro Copper Phthalocyanine	B	**	74160, 74260, 77891	PG7, PB15:3, PW6	0.5B 5.0/9.0
A268	Compose Blue # 2	Copper Phthalocyanine, Titanium Dioxide	B	**	74160, 77891	PB15, PW6	1.5PB 5.0/11.5
A284	Compose Bordeaux	Thioindigo Pigment, Quinacridone Pigment, Titanium Dioxide	B	**	73312, 73915, 77891	PR88, PR122, PW6	8.0P 4.5/10.0
A249	Compose Green	Polychloro Copper Phthalocyanine, Titanium Dioxide	B	**	74260, 77891	PG7, PW6	10.0G 5.0/10.5
A208	Compose Rose	Monoazo Pigment, Titanium Dioxide	B	**	12485, 77891	PR146, PW6	6.5RP 4.5/13.0
A283	Compose Violet	Dioxazine Pigment, Titanium Dioxide	B	**	51319, 77891	PV23, PW6	10.0PB 5.0/11.0
A247	Cyprus Green	Cobalt-Chromium Aluminate	D	****	77343	PG26	7.0BG 3.5/7.0
A309	Dark Brown	Monoazo Pigment, Carbon	B	**	12460, 77266	PR9, PBk7	8.0YR 1.0/1.0
A203	Flame Red	Monoazo Pigment	B	**	12460	PR9	6.5R 4.0/14.5
A227	Greenish Yellow	Azomethine Cu-Complex, Benzimidazolone	C	***	48042, 11781	PY129, PY154	9.5Y 4.0/5.5
A331	Grey of Grey V-7	Carbon, Hydrous Iron Oxide, Titanium Dioxide	A	***	77266, 77492, 77891	PY42, PBk7, PW6	V 7.0
A330	Grey V-5	Hydrous Iron Oxide, Carbon, Titanium Dioxide	A	***	77266, 77891	PY42, PBk7, PW6	V 5.0
A241	Hooker's Green	Nitroso Pigment	A	**	10006	PG8	5.5G 0.5/1.5
A230	Jaune Brillant	Monoazo Pigment, Disazo Pigment, Titanium Dioxide	B	**	12475, 21108, 77891	PR170, PY83, PW6	2.5YR 7.5/7.0
A263	Katsura Blue	Copper Phthalocyanine	B	***	74160	PB15	8.0PB 1.5/6.0
A307	Lamp Black	Carbon	A	****	77266	PBk7	V 0.5
A220	Lemon	Monoazo Pigment	B	**	11710	PY3	7.5Y 8.5/12.5
A308	Light Brown	Condensed Azo Pigment	C	***	20060	PBr23	2.5YR 2.0/3.0
A228	Light Yellow	Monoazo Pigment	B	**	11710	PY3	8.0Y 9.0/12.5
A367	Luminous Green	Fluorescent Pigment	C	----	74160	SY135, SY116, SY44, PG7	-
A366	Luminous Lemon	Fluorescent Pigment	C	----	-	SY135, SY116, SY44	-
A362	Luminous Opera	Fluorescent Pigment	C	----	45174, 45160	BR1:1, BV11:1	-
A364	Luminous Orange	Fluorescent Pigment	C	----	45160, 45174	BR1, BV11:1, SY135	-
A363	Luminous Red	Fluorescent Pigment	C	----	45160, 45174	BR1, BV11:1, SY135	-
A361	Luminous Rose	Fluorescent Pigment	C	----	48020, 45175, 45160	BV7, BV11:1	-
A360	Luminous Violet	Fluorescent Pigment	C	----	45174	BV7, BV15, AB83	-
A365	Luminous Yellow	Fluorescent Pigment	C	----	45160	BR1, SY135	-
A270	Manganese Blue Nova	Copper Phthalocyanine	B	***	74160	PB15:3	1.0PB 4.5/12.0
A222	Marigold	Disazo Pigment	B	**	21108	PY83	5.5YR 7.0/15.5
A306	Mars Black	Ferroso-Ferric Oxide	A	****	77499	PBk11	V 2.0
A282	Mars Violet	Iron Oxide	A	****	77491	PR101	7.5R 3.0/5.5
A250	Middle Green	Monoazo Pigment, Polychloro Copper Phthalocyanine	B	**	11710, 74260	PY3, PG7	1.0G 5.0/13.5
A229	Naples Yellow	Nickel-Antimony Titanate, Titanium Dioxide	B	***	77788, 77891	PY53, PW6	1.5Y 8.0/8.0
A204	Orange Red	Benzimidazolone	B	**	21110	PO36	8.0R 4.5/14.0
A264	Oriental Blue	Copper Phthalocyanine	B	***	74160	PB15:3	8.5PB 1.5/6.8
A240	Oriental Green	Polychloro Copper Phthalocyanine	B	***	74260	PG7	2.5BG 1.5/4.5
A265	Peacock Blue	Polychloro Copper Phthalocyanine, Monoazo Pigment, Copper Phthalocyanine	B	**	74160, 11710	PY3, PG7, PB15	8.5B 1.5/2.0
A348	Pearl Blue	Titanated Mica	C	****	77019	PW20	-
A342	Pearl Copper	Titanated Mica	C	****	77019	PW20	-
A341	Pearl Gold	Titanated Mica	C	****	77019	PW20	-
A347	Pearl Green	Titanated Mica	C	****	77019	PW20	-
A344	Pearl Pink	Titanated Mica	C	****	77019	PW20	-
A345	Pearl Red	Titanated Mica	C	****	77019	PW20	-
A349	Pearl Silver	Titanated Mica	C	****	77019	PW20	-
A343	Pearl Sparkle	Titanated Mica	C	****	77019	PW20	-
A340	Pearl White	Titanated Mica	C	****	77019	PW20	-
A346	Pearl Yellow	Titanated Mica	C	****	77019	PW20	-
A303	Raw Sienna	Hydrous Iron Oxide (Native Earth)	A	****	77492	PY43	4.5YR 4.5/5.5
A304	Raw Umber	Iron-Manganese Oxide-Hydroxide (Native Earth)	A	****	77491, 77492, 77499, 77727, 77730	PBr7	1.0Y 3.0/1.0
A305	Red Ochre	Iron Oxide	A	****	77491	PR101	10.0R 3.5/7.5
A285	Rose Violet	Quinacridone Pigment	C	***	73915	PR122	1.0R 2.5/10.0
A320	Titanium White	Titanium Dioxide	A	****	77891	PW6	V 9.5
A262	Ultramarine Blue	Complex of Silica, Alumina, Soda & Sulphur	A	***	77007	PB29	8.0PB 2.5/15.0

A280	Violet	Dioxazine Pigment	B	**	51319	PV23	4.0P 1.5/0.5
A221	Yellow	Monoazo Pigment	B	**	11680	PY1	3.5Y 8.5/14.0
A226	Yellow Ochre	Hydrous Iron Oxide	A	****	77492	PY42	9.5YR 6.0/7.5
A321	Zinc White	Zinc Sulfide, Barium Sulfate	A	***	77115	PW5	V 9.5

HOLBEIN "AEROFLASH" LIQUID ACRYLIC

Ref No.	Color Name	Chemical Name	Perm Rating	Color Index Number	Color Index Name	Munsell Rating
E067	Black	Carbon	***	77266	PBk7	V1.8
E024	Blue Green	Polychloro Copper Phthalocyanine, Copper Phthalocyanine	**	74260, 74160	PG7, PB15	8.0BG 4.5/9.5
E040	Blue Violet	Dioxazine Pigment, Copper Phthalocyanine	**	51319, 74160	PB15:3, PV23	8.0PB 2.0/14.0
E051	Burnt Sienna	Monoazo Pigment, Disazo Pigment	*	12315, 21108	PR22, PY83	2.0R 5.0/10.0
E050	Burnt Umber	Monoazo Pigment, Disazo Pigment, Carbon	*	12315, 21108, 77266	PR22, PY83, PBk7	2.5YR 4.0/6.5
E002	Carmine	Quinacridone Pigment	**	73900	PV19	2.0R 4.5/14.0
E031	Cerulean Blue	Copper Phthalocyanine	**	74160	PB15:3	2.5PB 4.0/14.0
E032	Cobalt Blue	Copper Phthalocyanine	**	74160	PB15	5.5PB 3.5/15.0
E011	Deep Yellow	Disazo Pigment	**	21108	PY83	3.0Y 8.0/13.0
E066	Grey No. 4	Titanium Dioxide, Carbon	***	77891, 77266	PW6, PBk7	V4
E065	Grey No. 5	Titanium Dioxide, Carbon	***	77891, 77266	PW6, PBk7	V5
E064	Grey No. 6	Titanium Dioxide, Carbon	***	77891, 77266	PW6, PBk7	V6
E063	Grey No. 7	Titanium Dioxide, Carbon	***	77891, 77266	PW6, PBk7	V7
E062	Grey No. 8	Titanium Dioxide, Carbon	***	77891, 77266	PW6, PBk7	V8
E061	Grey No. 9	Titanium Dioxide, Carbon	***	77891, 77266	PW6, PBk7	V9
E013	Lemon Yellow	Monoazo Pigment	**	11727	PY98	10.0Y 9.0/11.5
E020	Light Green	Monoazo Pigment, Polychloro Copper Phthalocyanine	**	11727, 74260	PY98, PG7	6.0GY 8.0/12.0
E099	Luminous Green	Fluorescent Pigment, Polychloro Copper Phthalocyanine	-	-, 74260	BY40, PG7	-
E098	Luminous Lemon	Fluorescent Pigment	-	-	BY40, BY160:1, DisY82	-
E095	Luminous Opera	Fluorescent Pigment	-	45160, 45174	BR1:1, BV11:1	-
E097	Luminous Orange	Fluorescent Pigment	-	-, 45160, 45174	BY40, BR1:1, BV11:1	-
E096	Luminous Red	Fluorescent Pigment	-	-, 45160, 45174	BY40, BR1:1, BV11:1	-
E094	Luminous Rose	Fluorescent Pigment	-	45174, 48020	BV7, BV11:1	-
E001	Magenta	Monoazo Pigment	*	12360	PR31	7.0RP 4.5/14.5
E021	May Green	Monoazo Pigment, Disazo Pigment, Polychloro Copper Phthalocyanine	**	11727, 21108, 74260	PY98, PY83, PG7	8.5GY 6.0/11.0
E022	Moss Green	Disazo Pigment, Copper Phthalocyanine	**	21108, 74160	PY83, PB15	8.0GY 3.5/5.0
E080	Op. Brilliant Pink	Titanium Dioxide, Quinacridone Pigment	**	73900, 77891	PV19, PW6	4.0RP 7.0/8.5
E078	Op. Brown	Iron Oxide	***	77491	PR101	8.5R 4.5/7.5
E076	Op. Cerulean	Copper Phthalocyanine	**	74160	PB15	5.0PB 3.5/11.0
E085	Op. Cobalt Violet	Titanium Dioxide, Fluorescent Pigment, Dioxazine Pigment	*	45174, 48020, 51319, 77891	BV11:1, BV7, PV23, PW6	2.5P 4.5/12.5
E083	Op. Compose Blue	Titanium Dioxide, Copper Phthalocyanine	**	77891, 74160	PB15, PW6	10.0B 6.8/8.5
E073	Op. Deep Yellow	Disazo Pigment	**	21108	PY83	2.5Y 8.0/13.0
E082	Op. Emerald Green	Polychloro Copper Phthalocyanine, Titanium Dioxide	**	74260, 77891	PG7, PW6	5.0G 7.5/7.5
E081	Op. Jaune Brillant	Quinacridone Pigment, Disazo Pigment, Titanium Dioxide	**	73900, 21108, 77891	PV19, PY83, PW6	5.0YR 7.5/6.0
E084	Op. Lilac	Titanium Dioxide, Dioxazine Pigment, Copper Phthalocyanine	**	77891, 74160, 51319	PB15, PV23, PW6	10.0PB 7.0/7.5
E071	Op. Magenta	Monoazo Pigment	*	12360	PR31	8.5RP 4.5/12.0
E072	Op. Scarlet	Monoazo Pigment	*	12315	PR22	6.0R 4.5/13.0
E077	Op. Violet	Dioxazine Pigment	**	51319	PV23	2.5P 3.5/9.0
E075	Op. Viridian	Polychloro Copper Phthalocyanine	**	74260	PG7	1.0BG 4.5/6.5
E074	Op. Yellow Ochre	Hydrous Iron Oxide	***	77492	PY42	10.0YR 7.0/9.5
E010	Orange	Monoazo Pigment, Disazo Pigment	*	12315, 21108	PR22, PY83	1.5YR 5.5/14.5
E049	Raw Sienna	Disazo Pigment, Hydrous Iron Oxide	**	21108, 77492	PY83, PY42	6.0YR 5.0/6.5
E048	Raw Umber	Disazo Pigment, Iron Oxide, Carbon	**	21108, 77491, 77266	PY83, PR101, PBk7	8.0YR 3.5/3.0
E042	Red Violet	Dioxazine Pigment, Monoazo Pigment	*	51319, 12360	PR31, PV23	1.5RP 3.5/11.0
E003	Scarlet	Monoazo Pigment	*	12315	PR22	6.0R 5.0/13.5
E053	Sepia	Monoazo Pigment, Disazo Pigment, Carbon	*	12315, 21108, 77266	PR22, PY83, PBk7	5.0Y 2.5/2.0

HOLBEIN AEROFLASH LIQUID ACRYLIC (cont.)

Ref No.	Color Name	Chemical Name	Perm Rating	Color Index Number	Color Index Name	Munsell Rating
E030	Turquoise Blue	Polychloro Copper Phthalocyanine, Copper Phthalocyanine	**	74260, 74160	PG7, PB15:3	7.5B 3.5/10.0
E033	Ultramarine	Complex of Silica Alumina, Soda & Sulphur	**	77007	PB29	7.5PB 3.5/17.0
E041	Violet	Dioxazine Pigment	**	51319	PV23	1.0P 2.5/14.0
E023	Viridian	Polychloro Copper Phthalocyanine	**	74260	PG7	10.0G 4.5/11.0
E060	White	Titanium Dioxide	***	77891	PW6	V 9.0
E012	Yellow	Disazo Pigment, Monoazo Pigment	**	21108, 11727	PY83, PY98	6.0Y 8.5/12.5

HOLBEIN ARTIST SOFT PASTELS

Ref No.	Color Name	Chemical Name	Perm Rating	Color Index Number	Color Index Name	Munsell Rating
1570-1	White	Titanium Dioxide	***	77891	PW6	N 9.3
2	Gray III	Titanium Dioxide, Carbon Black, Black Iron Oxide	***	77891, 77726, 77499	PW6, PBk7, PBk11	N 8.4
3	Cool Gray III	Titanium Dioxide, Carbon Black, Black Iron Oxide, Phthalocyanine	***	77891, 77726, 77499, --	PW6, PBk7, PBk11, PB68	1.6B 8.3/0.9
4	Gray II	Titanium White, Carbon Black, Black Iron Oxide	***	77891, 77726, 77499	PW6, PBk7, PBk11	N 7.6
5	Cool Gray II	Titanium Dioxide, Iron Hydroxide, Carbon Black, Phthalocyanine	*	77891, 77492, 77726, 74160	PW6, PY42, PBk7, PB15	8.7B 7.5/1.7
6	Dark Gray III	Titanium Dioxide, Carbon Black, Black Iron Oxide	***	77891, 77726, 77499	PW6, PBk7, PBk11	N 7.8
7	Gray	Titanium Dioxide, Carbon Black, Black Iron Oxide	***	77891, 77726, 77499	PW6, PBk7, PBk11	N 6.7
8	Dark Gray II	Titanium Dioxide, Carbon Black, Black Iron Oxide	***	77891, 77726, 77499	PW6, PBk7, PBk11	N 5.9
9	Cool Gray I	Titanium Dioxide, Titan Yellow, Carbon Black, Phthalocyanine	*	77891, 77738, 77726, 74160	PW6, PY53, PBk7, PB15	8.5B 6.7/1.5
10	Yellow Gray II	Titanium Dioxide, Black Iron Oxide, Titan Yellow	*	77891, 77499, 77738	PW6, PBk11, PY53	3.6GY 6.7/0.7
11	Yellow Gray I	Titanium Dioxide, Black Iron Oxide, Titan Yellow	*	77891, 77499, 77738	PW6, PBk11, PY53	4.0GY 5.6/0.8
12	Dark Gray	Titanium Dioxide, Carbon Black, Black Iron Oxide	***	77891, 77726, 77499	PW6, PBk7, PBk11	N 4.1
13	Black I	Black Iron Oxide, Carbon Black	***	77499, 77726	PBk11, PBk7	N 2.1
14	Black II	Black Iron Oxide, Iron Oxide, Iron Hydroxide	**	77499, 77491, 77492	PBk11, PR101, PY42	N 2.5
15	Old Gray Rose I	Black Iron Oxide, Monoazo, Pyrazolone	**	77499, 12485, 21115	PBk11, PR146, PO34	9.8RP 2.6/1.4
16	Old Gray Rose II	Black Iron Oxide, Iron Oxide, Phthalocyanine, Quinacridone	*	77499, 77491, 74160, 73907	PBk11, PR101, PB15:3, PR202	3.0RP 4.2/2.3
17	Old Gray Rose III	Titanium Dioxide, Iron Oxide, Black Iron Oxide, Phthalocyanine, Quinacridone	**	77891, 77491, 77499, 74160, 73907	PW6, PR101, PBk11, PB15:3, PR202	8.7RP 5.2/2.4
18	Vandyke Brown III	Titanium Dioxide, Black Iron Oxide, Iron Oxide Isoindolinone	*	77891, 77499, 77491, 56280	PW6, PBk11, PR101, PY110	8.3YR 5.2/2.6
19	Vandyke Brown II	Titanium Dioxide, Black Iron Oxide, Iron Oxide Isoindolinone	**	77891, 77499, 77491, 56280	PW6, PBk11, PR101, PY110	9.0YR 4.5/2.2
20	Vandyke Brown I	Titanium Dioxide, Black Iron Oxide, Iron Oxide Isoindolinone	**	77891, 77499, 77491, 56280	PW6, PBk11, PR101, PY110	9.5YR 3.8/2.1
21	Burnt Umber IV	Titanium Dioxide, Black Iron Oxide, Iron Oxide, Iron Hydroxide	***	77891, 77499, 77491, 77492	PW6, PBk11, PR101, PY42	2.8YR 6.6/2.3
22	Burnt Umber III	Titanium Dioxide, Black Iron Oxide, Iron Oxide, Iron Hydroxide, Monoazo	***	77891, 77499, 77491, 77492, 11710	PW6, PBk11, PR101, PY42, PY3	0.5YR 5.5/1.8
23	Burnt Umber II	Titanium Dioxide, Black Iron Oxide, Iron Oxide, Iron Hydroxide, Monoazo	***	77891, 77499, 77491, 77492, 11710	PW6, PBk11, PR101, PY42, PY3	1.6YR 4.2/2.2
24	Burnt Umber I	Titanium Dioxide, Black Iron Oxide, Iron Oxide, Iron Hydroxide	***	77891, 77499, 77491, 77492	PW6, PBk11, PR101, PY42	2.2YR 3.8/2.5
25	Light Ochre	Titanium Dioxide, Isoindolinone	***	77891, 56280	PW6, PY110	2.1Y 8.6/7.5
26	Yellow Ochre III	Iron Hydroxide, Black Iron Oxide	***	77492, 77499	PY42, PBk11	2.2Y 7.9/6.1
27	Yellow Ochre II	Iron Hydroxide, Black Iron Oxide	***	77492, 77499	PY42, PBk11	1.6Y 6.6/8.0
28	Yellow Ochre I	Iron Hydroxide, Iron Oxide, Black Iron Oxide	***	77492, 77491, 77499	PY42, PR101, PBk11	8.6YR 5.6/6.5
29	Olive Brown I	Titanium Dioxide, Iron Hydroxide, Iron Oxide, Black Iron Oxide, Disazo	**	77891, 77492, 77491, 77499, 21108	PW6, PY42, PR101, PBk11, PY83	0.4YR 5.1/5.2
30	Olive Brown II	Titanium Dioxide, Iron Hydroxide, Iron Oxide, Black Iron Oxide, Disazo	*	77891, 77492, 77491, 77499, 21108	PW6, PY42, PR101, PBk11, PY83	1.5Y 6.4/5.5

HOLBEIN ARTIST SOFT PASTELS (cont.)

Ref No.	Color Name	Chemical Name	Perm Rating	Color Index Number	Color Index Name	Munsell Rating
31	Olive Brown III	Titanium Dioxide, Iron Hydroxide, Iron Oxide, Black Iron Oxide, Disazo	*	77891, 77492, 77491, 77499, 21108	PW6, PY42, PR101, PBk11, PY83	2.2Y 7.2/5.0
32	Olive Brown Dark I	Black Iron Oxide, Isoindolinone, Iron Oxide	**	77499, 56280, 77491	PBk11, PY110, PR101	2.4Y 4.0/1.8
33	Olive Brown Dark II	Black Iron Oxide, Isoindolinone, Iron Oxide	**	77499, 56280, 77491	PBk11, PY110, PR101	1.7Y 4.4/3.0
34	Olive Brown Dark III	Black Iron Oxide, Isoindolinone, Iron Oxide	*	77499, 56280, 77491	PBk11, PY110, PR101	1.1Y 5.0/4.2
35	Pale Brown III	Titanium Dioxide, Iron Hydroxide, Iron Oxide, Black Iron Oxide	***	77891, 77492, 77491, 77499	PW6, PY42, PR101, PBk11	8.5YR 8.0/3.3
36	Pale Brown II	Titanium Dioxide, Titan Yellow, Iron Oxide	*	77891, 77738, 77491	PW6, PY53, PR101	3.7YR 7.6/4.0
37	Pale Brown I	Titanium Dioxide, Iron Oxide, Disazo	*	77891, 44791, 21108	PW6, PR101, PY83	10.0R 5.5/6.4
38	English Red II	Titanium Dioxide, Iron Hydroxide, Iron Oxide	***	77891, 77492, 77491	PW6, PY42, PR101,	9.9R 5.0/6.8
39	English Red I	Titanium Dioxide, Iron Oxide, Monoazo	**	77891, 77491, 11710	PW6, PR101, PY3	8.9R 3.7/7.1
40	Raw Sienna III	Titanium Dioxide, Iron Hydroxide, Iron Oxide, Monoazo	*	77891, 77492, 77491, 11710	PW6, PY42, PR101, PY3	6.3Y 6.9/5.9
41	Raw Sienna II	Titanium Dioxide, Iron Hydroxide, Iron Oxide, Monoazo	*	77891, 77492, 77491, 11710	PW6, PY42, PR101, PY3	5.9YR 6.4/6.8
42	Raw Sienna I	Titanium Dioxide, Iron Hydroxide, Iron Oxide, Monoazo	***	77891, 77492, 77491, 11710	PW6, PY42, PR101, PY3	5.6YR 5.9/7.6
43	Burnt Sienna III	Titan Yellow, Iron Oxide, Monoazo	***	77738, 77491, 11710	PY53, PR101, PY3	2.7YR 5.7/7.0
44	Burnt Sienna II	Titanium Dioxide, Titan Yellow, Iron Oxide, Monoazo	**	77891, 77738, 77491, 11710	PW6, PY53, PR101, PY3	2.6YR 6.7/5.5
45	Burnt Sienna I	Iron Hydroxide, Iron Oxide, Monoazo, Black Iron Oxide	***	77492, 77491, 11710, 77499	PY42, PR101, PY3, PBk11	4.0YR 5.3/6.6
46	Grayish Brown III	Titanium Dioxide, Iron Hydroxide, Iron Oxide, Carbon Black	***	77891, 77492, 77491, 77726	PW6, PY42, PR101, PBk7	6.8YR 7.0/2.1
47	Grayish Brown II	Titanium Dioxide, Iron Hydroxide, Iron Oxide, Carbon Black	**	77891, 77492, 77491, 77726	PW6, PY42, PR101, PBk7	9.2YR 6.0/3.1
48	Grayish Brown I	Titanium Dioxide, Iron Hydroxide, Iron Oxide, Carbon Black	***	77891, 77492, 77491, 77726	PW6, PY42, PR101, PBk7	6.6YR 5.1/2.7
49	Yellow III	Titanium Dioxide, Titan Yellow, Monoazo	***	77891, 77738, 11767	PW6, PY53, PY97	9.0Y 9.0/7.5
50	Lemon Yellow II	Titanium Dioxide, Titan Yellow, Monoazo	**	77891, 77738, 11710	PW6, PY53, PY3	1.2GY 9.0/6.9
51	Lemon Yellow I	Titanium Dioxide, Titan Yellow, Monoazo	***	77891, 77738, 11710	PW6, PY53, PY3	0.1GY 8.8/9.9
52	Yellow II	Titanium Dioxide, Titan Yellow, Monoazo	***	77891, 77738, 11767	PW6, PY53, PY97	7.6Y 8.8/10.6
53	Yellow I	Titan Yellow, Monoazo	***	77738, 11767	PY53, PY97	6.6Y 8.8/13.3
54	Chrome Yellow II	Titanium Dioxide, Isoindolinone, Disazo	***	77891, 56280, 21096	PW6, PY110, PY55	2.4Y 8.2/12.8
55	Chrome Yellow I	Titanium Dioxide, Disazo	***	77891, 21096	PW6, PY55	1.8Y 8.2/14.5
56	Naples Yellow III	Titanium Dioxide, Monoazo	*	77891, 11690	PW6, PO1	9.7YR 8.4/7.0
57	Naples Yellow I	Titanium Dioxide, Isoindolinone	**	77891, 56280	PW6, PY110	0.8Y 8.1/9.5
58	Naples Yellow II	Titanium Dioxide, Monoazo	*	77891, 11690	PW6, PO1	9.2Y 8.1/9.6
59	Yellow Orange III	Titanium Dioxide, Monoazo, Pyrazolone	**	77891, 11690, 21115	PW6, PO1, PO34	7.3YR 7.8/10.9
60	Yellow Orange II	Titanium Dioxide, Monoazo, Pyrazolone	***	77891, 11690, 21115	PW6, PO1, PO34	4.9YR 7.1/12.8
61	Yellow Orange I	Titanium Dioxide, Monoazo, Pyrazolone	**	77891, 11710, 21115	PW6, PY3, PO34	4.9YR 6.9/10.5
62	Orange II	Titanium Dioxide, Isoindolinone, Perinone	**	77891, 56280, 71105	PW6, PY110, PO43	2.2YR 7.1/11.4
63	Orange I	Titanium Dioxide, Monoazo, Pyrazolone	**	77891, 11690, 21115	PW6, PO1, PO34	1.2YR 6.4/13.5
64	Vermilion I	Pyrazolone, Azo Pigment, Black Iron Oxide	**	21115, --, 77499	PO34, PBk11	8.5R 5.5/12.9
65	Vermilion II	Titanium Dioxide, Pyrazolone, Isoindolinone, Black Iron Oxide	***	77891, 21115, 56280, 77499	PW6, PO34, PY110, PBk11	9.6R 5.9/12.8
66	Vermilion III	Titanium Dioxide, Pyrazolone, Isoindolinone, Black Iron Oxide	**	77891, 21115, 56280, 77499	PW6, PO34, PY110, PBk11	9.7R 6.4/11.2
67	Fresh Pink I	Titanium Dioxide, Monoazo, Pyrazolone	***	77891, 11690, 21115	PW6, -, PO34	0.6YR 7.1/10.2
68	Fresh Pink II	Titanium Dioxide, Perinone	**	77891, 71105	PW6, PO43	0.6YR 7.8/7.3
69	Fresh Pink III	Titanium Dioxide, Pyrazolone	*	77891, 21115	PW6, PO34	0.9YR 8.2/5.0
70	Scarlet III	Titanium Dioxide, Pyrazolone, Monoazo	-	77891, 21115, 12485	PW6, PO34, PR146	6.3R 6.8/9.2
71	Scarlet II	Titanium Dioxide, Pyrazolone, Monoazo	**	77891, 21115, 12485	PW6, PO34, PR146	6.2R 6.1/11.7
72	Scarlet I	Titanium Dioxide, Pyrazolone, Monoazo	*	77891, 21115, 12485	PW6, PO34, PR146	6.4R 5.5/12.9
73	Ultramarine III	Titanium Dioxide, Ultramarine, Quinacridone	-	77891, 77007, 73915	PW6, PB29, PR122	9.4PB 6.8/7.0
74	Ultramarine II	Titanium Dioxide, Ultramarine, Quinacridone	*	77891, 77007, 73915	PW6, PB29, PR122	8.8PB 5.6/10.1
75	Ultramarine I	Titanium Dioxide, Ultramarine, Quinacridone	**	77891, 77007, 73915	PW6, PB29, PR122	8.2PB 4.6/12.3
76	Violet I	Titanium Dioxide, Ultramarine, Quinacridone	**	77891, 77007, 73915	PW6, PB29, PR122	3.0P 3.4/10.5
77	Violet II	Titanium Dioxide, Ultramarine, Quinacridone	*	77891, 77007, 73915	PW6, PB29, PR122	4.1P 4.3/10.1
78	Violet III	Titanium Dioxide, Ultramarine, Quinacridone	*	77891, 77007, 73915	PW6, PB29, PR122	4.3P 5.7/8.8
79	Magenta	Quinacridone, Quinacridone, Dioxazine	*	73900, 73915, 51319	PV19, PR122, PV23	1.5RP 3.3/8.6
80	Lavender I	Titanium Dioxide, Ultramarine, Quinacridone	-	77891, 77007, 73907	PW6, PB29, PR202	6.1P 5.9/7.6
81	Lavender III	Titanium Dioxide, Ultramarine, Quinacridone	*	77891, 77007, 73907	PW6, PB29, PR202	1.1RP 7.5/5.8
82	Red Purple III	Titanium Dioxide, Quinacridone, Quinacridone	*	77891, 73900, 73915	PW6, PV19, PR122	3.6RP 7.2/9.2
83	Red Purple II	Titanium Dioxide, Quinacridone, Quinacridone	*	77891, 73900, 73915	PW6, PV19, PR122	5.6RP 5.6/14.4
84	Red Purple I	Titanium Dioxide, Quinacridone, Quinacridone	*	77891, 73900, 73915	PW6, PV19, PR122	7.9RP 4.9/14.5
85	Pink I	Titanium Dioxide, Quinacridone	*	77891, 73915	PW6, PR122	3.5RP 5.4/13.2
86	Pink II	Titanium Dioxide, Quinacridone	*	77891, 73915	PW6, PR122	2.4RP 6.2/11.9

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Ref No.	Color Name	Chemical Name	Perm Rating	Color Index Number	Color Index Name	Munsell Rating
87	Pink III	Titanium Dioxide, Quinacridone	*	77891, 73915	PW6, PR122	1.8RP 7.4/7.8
88	Old Rose III	Titanium Dioxide, Quinacridone, Iron Oxide, Black Iron Oxide	*	77891, 73915, 77491, 77499	PW6, PR122, PR101, PBk11	3.1RP 7.8/4.7
89	Old Rose I	Titanium Dioxide, Quinacridone, Iron Oxide, Black Iron Oxide	*	77891, 73915, 77491, 77499	PW6, PR122, PR101, PBk11	3.9RP 6.4/7.1
90	Carmine	Black Iron Oxide, Naphthole AS	***	77499, 12490	PBk11, PR5	2.6R 4.4/13.2
91	Crimson III	Titanium Dioxide, Iron Oxide, Ultramarine, 2B-acid-Sr	*	77891, 77491, 77007, 15865:3	PW6, PR101, PB29, PR48:3	9.5RP 5.9/8.9
92	Crimson II	Titanium Dioxide, Iron Oxide, Ultramarine, 2B-acid-Sr	***	77891, 77491, 77007, 15865:3	PW6, PR101, PB29, PR48:3	1.5R 4.5/8.9
93	Crimson I	Monoazo, Black Iron Oxide, Quinacridone, Pyrazolone	**	12485, 77499, 73915, 21115	PR146, PBk11, PR122, PO34	1.0R 3.7/8.5
94	Permanent Red III	Titanium Dioxide, 2B-acid-SR	**	77891, 15865:3	PW6, PR48:3	0.7R 5.7/14.3
95	Permanent Red II	Titanium Dioxide, 2B-acid-SR	***	77891, 15865:3	PW6, PR48:3	4.2R 4.8/15.5
96	Permanent Red I	2B-acid-Sr	***	15865:3	PR48:3	5.5R 4.4/15.4
97	Cobalt Blue III	Titanium Dioxide, Ultramarine, Phthalocyanine, Phthalocyanine(x)	*	77891, 77007, N/A, 74160	PW6, PB29, PB68, PB15	3.3PB 6.0/10.1
98	Cobalt Blue II	Titanium Dioxide, Ultramarine, Phthalocyanine, Phthalocyanine(x)	**	77891, 77007, N/A, 74160	PW6, PB29, PB68, PB15	3.6PB 4.9/11.2
99	Cobalt Blue I	Phthalocyanine, Phthalocyanine (x), Black Iron Oxide	*	NA, 74160, 77499	PB68, PB15, PBk11	3.5PB 4.0/11.0
100	Prussian Blue I	Prussian Blue	***	77510	PB27	4.9PB 2.9/7.2
101	Prussian Blue II	Titanium Dioxide, Prussian Blue	**	77891, 77510	PW6, PB27	3.5PB 4.0/8.3
102	Prussian Blue III	Titanium Dioxide, Prussian Blue	**	77891, 77510	PW6, PB27	2.0PB 5.4/8.1
103	Indigo I	Ultramarine, Black Iron Oxide, Phthalocyanine(x), 4B-acid-Ca	*	77007, 77499, 74160, 15850:1	PB29, PBk11, PB15, PR57:1	5.8PB 2.5/3.5
104	Indigo II	Ultramarine, Black Iron Oxide, Phthalocyanine(x), 4B-acid-Ca	*	77007, 77499, 74160, 15850:1	PB29, PBk11, PB15, PR57:1	4.8PB 3.3/4.4
105	Indigo III	Ultramarine, Black Iron Oxide, Phthalocyanine(x), 4B-acid-Ca	*	77007, 77499, 74160, 15850:1	PB29, PBk11, PB15, PR57:1	3.2PB 5.1/4.1
106	Blue Gray I	Titanium Dioxide, Black Iron Oxide, Phthalocyanine(x)	**	77891, 77499, 74160	PW6, PBk11, PB15	0.2PB 3.6/3.9
107	Blue Gray II	Titanium Dioxide, Black Iron Oxide, Phthalocyanine(x)	*	77891, 77499, 74160	PW6, PBk11, PB15	1.0PB 5.2/4.1
108	Blue Gray III	Titanium Dioxide, Black Iron Oxide, Phthalocyanine(x)	**	77891, 77499, 74160	PW6, PBk11, PB15	1.0PB 5.9/5.0
109	Light Blue III	Titanium Dioxide, Phthalocyanine, Phthalocyanine, Phthalocyanine(x), Monoazo	*	77891, 74160, NA, 74160, 11710	PW6, PB15:3, PB68, PB15, PY3	9.0B 6.2/8.8
110	Light Blue II	Titanium Dioxide, Phthalocyanine, Phthalocyanine, Phthalocyanine(x), Monoazo	*	77891, 74160, NA, 74160, 11710	PW6, PB15:3, PB68, PB15, PY3	8.6B 5.5/9.5
111	Light Blue I	Titanium Dioxide, Phthalocyanine, Phthalocyanine, Phthalocyanine(x), Monoazo	**	77891, 74160, NA, 74160, 11710	PW6, PB15:3, PB68, PB15, PY3	9.0B 4.2/10.2
112	Turquoise Blue I	Titanium Dioxide, Black Iron Oxide, Phthalocyanine(x), Chlorinate Phthalocyanine	*	77891, 77499, 74160, 74260	PW6, PBk11, PB15, PG7	5.9B 3.7/6.5
113	Turquoise Blue II	Titanium Dioxide, Black Iron Oxide, Phthalocyanine(x), Chlorinate Phthalocyanine	*	77891, 77499, 74160, 74260	PW6, PBk11, PB15, PG7	6.3B 4.5/7.4
114	Cerulean Blue I	Phthalocyanine, Monoazo, Black Iron Oxide	*	NA, 11710, 77499	PB68, PY3, PBk11	2.8B 4.8/8.0
115	Cerulean Blue II	Titanium Dioxide, Phthalocyanine, Phthalocyanine, Phthalocyanine(x), Monoazo	-	77891, 74160, NA, 74160, 11710	PW6, PB15:3, PB68, PB15, PY3	5.4B 6.1/7.2
116	Compose Green I	Chlorinate Phthalocyanine, Phthalocyanine, Black Iron Oxide	*	74260, NA, 77499	PG7, PB68, PBk11	9.6BG 6.1/7.2
117	Compose Green II	Titanium Dioxide, Chlorinate Phthalocyanine, Phthalocyanine, Monoazo	*	77891, 74260, NA, 11710	PW6, PG7, PB68, PY3	0.9B 6.5/7.2
118	Compose Green III	Titanium Dioxide, Chlorinate Phthalocyanine, Phthalocyanine, Monoazo	-	77891, 74260, NA, 11710	PW6, PG7, PB68, PY3	2.5B 7.6/5.1
119	Ultramarine Blue	Ultramarine, Phthalocyanine(x), Dioxazine, Black Iron Oxide	**	77007, 74160, 51319, 77499	PB29, PB15, PV23, PBk11	7.3PB 3.9/13.5
120	Ultramarine Blue Light	Ultramarine, Phthalocyanine(x), Dioxazine, Black Iron Oxide	*	77007, 74160, 51319, 77499	PB29, PB15, PV23, PBk11	7.0PB 5.3/10.7
121	Olive I	Titan Yellow, Ultramarine, Black Iron Oxide, Monoazo, Iron Oxide	**	77738, 77007, 77499, 11710, 77491	PY53, PB29, PBk11, PY3, PR101	4.2G 4.1/1.6
122	Olive II	Titan Yellow, Ultramarine, Monoazo, Iron Oxide, Chlorinate Phthalocyanine	***	77738, 77007, 11767, 77491, 74260	PW53, PB29, PY97, PR101, PG7	1.9GY 5.1/4.6
123	Olive III	Titan Yellow, Ultramarine, Monoazo, Monoazo, Iron Oxide	***	77738, 77007, 11767, 11710, 77491	PY53, PB29, PY97, PY3, PR101	0.5GY 6.0/5.2

124	Olive Green	Disazo, Cobalt Titanate Green Spinel, Chlorinate Phthalocyanine, Black Iron Oxide	**	21108, 77377, 74260, 77499	PY83, PG50, PG7, PBk11	5.7GY 5.8/7.5
125	Yellow Green Light	Titan Yellow, Monoazo, Cobalt Titanate Green Spinel	***	77738, 11710, 77377	PY53, PY3, PG50	2.1GY 8.6/9.1
126	Yellow Green	Titan Yellow, Monoazo, Cobalt Titanate Green Spinel, Black Iron Oxide	***	77738, 11710, 77377 77499	PY53, PY3, PG50 PBk11	4.6GY 7.8/6.9
127	Moss Green	Cobalt Titanate Green Spinel, Disazo, Black Iron Oxide, Chlorinate Phthalocyanine	**	77377, 21108, 77499, 74260	PG50, PY83, PBk11, PG7	9.2GY 4.5/5.9
128	Grass Green	Titanium Dioxide, Monoazo, Phthalocyanine	**	77891, 11767, NA	PW6, PY97, PB68	9.2GY 6.1/9.5
129	Pale Green	Titanium Dioxide, Monoazo, Chlorinate Phthalocyanine	*	77891, 11710, 74260	PW6, PY3, PG7	5.2G 7.2/8.0
130	Emerald Green	Monoazo, Chlorinate Phthalocyanine, Phthalocyanine	***	11710, 74260, 74160	PY3, PG7, PB15:3	4.1G 5.6/11.1
131	Dark Green	Cobalt Titanate Green Spinel, Disazo, Black Iron Oxide, Chlorinate Phthalocyanine	**	77377, 21108, 77499, 74260	PG50, PY83, PBk11, PG7	0.4G 3.9/4.1
132	Green Gray	Titanium Dioxide, Chlorinate Phthalocyanine, Black Iron Oxide, Monoazo	*	77891, 74260, 77499, 11710	PW6, PG7, PBk11, PY3	0.8BG 6.1/5.8
133	Focus Green	Chlorinate Phthalocyanine, Black Iron Oxide, Monoazo	*	74260, 77499, 11710	PG7, PBk11, PY3	5.7G 5.0/6.6
134	Cobalt Green	Titanium Dioxide, Chlorinate Phthalocyanine, Phthalocyanine, Monoazo	**	77891, 74260, NA, 11710	PW6, PG7, PB68, PY3	3.4BG 5.4/8.8
135	Cobalt Green Light	Titanium Dioxide, Chlorinate Phthalocyanine, Phthalocyanine, Monoazo	-	77891, 74260, NA, 11710	PW6, PG7, PB68, PY3	5.6BG 6.9/6.7
136	Foggy Green III	Titanium Dioxide, Ultramarine, Cobalt Titanate Green Spinel, Isoindolinone, Black Iron Oxide	**	77891, 77007, 77377, 56280, 77499	PW6, PB29, PG50, PY110, PBk11	2.7G 7.0/1.9
137	Foggy Green II	Titanium Dioxide, Ultramarine, Cobalt Titanate Green Spinel, Isoindolinone, Black Iron Oxide	**	77891, 77007, 77377, 56280, 77499	PW6, PB29, PG50, PY110, PBk11	6.4G 5.5/2.5
138	Foggy Green I	Titanium Dioxide, Ultramarine, Cobalt Titanate Green Spinel, Isoindolinone, Black Iron Oxide	**	77891, 77007, 77377, 56280, 77499	PW6, PB29, PG50, PY110, PBk11	1.5BG 4.3/2.4
139	Deep Green III	Chlorinate Phthalocyanine, Black Iron Oxide, Disazo, Phthalocyanine(x)	*	74260, 77499, 21108, 74160	PG7, PBk11, PY83, PB15	5.8G 5.2/5.7
140	Deep Green II	Chlorinate Phthalocyanine, Black Iron Oxide, Disazo, Phthalocyanine(x)	**	74260, 77499, 21108, 74160	PG7, PBk11, PY83, PB15	6.0G 3.4/4.9
141	Deep Green I	Black Iron Oxide, Chlorinate Phthalocyanine	**	77499, 74260	PBk11, PG7	4.5G 2.8/2.8
142	Viridian	Chlorinate Phthalocyanine, Titan Yellow	**	74260, 77738	PG7, PY53	1.8BG 4.5/8.7
143	Blue Green II	Cobalt Titanate Green Spinel, Titanium Dioxide, Phthalocyanine	*	77377, 77891, NA	PG50, PW6, PB68	8.2BG 4.7/7.0
144	Blue Green I	Black Iron Oxide, Chlorinate Phthalocyanine	**	77499, 74260	PBk11, PG7	4.2BG 3.8/4.7

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Ref No.	Color Name	Chemical Name	Color Index Number	Color Index Name
1247- 5A	Hansa Yellow	Titanium Dioxide, Monoazo	77891, 11710	PW6, PY3
5B	Chrome Yellow	Titanium Dioxide, Monoazo, Disazo	77891, 11767, 21108	PW6, PY97, PY83
5C	Antique Yellow	Titanium Dioxide, Disazo, Perinone	77891, 21108, 71105	PW6, PY83, PO43
10A	Antique Orange	Titanium Dioxide, Perinone, Monoazo	77891, 71105, 11767	PW6, PO43, PY97
10B	Vermillion	Titanium Dioxide, Pyrazolone	77891, 21115	PW6, PO34
13A	Scarlet	Titanium Dioxide, Naphthole AS, Pyrazolone	77891, 12490, 21115	PW6, PR5, PO34
13C	Permanent Red	Titanium Dioxide, Naphthole AS, Pyrazolone	77891, 12490, 21115	PW6, PR5, PO34
13E	Carmine	Titanium Dioxide, Naphthole AS, Naphthole AS	77891, 12490, NA	PW6, PR5, PR213
13F	Crimson	Titanium Dioxide, Monoazo, Quinacridone, Azo Pigment	77891, 12485, 73900, NA	PW6, PR146, PV19, NA
13G	Rose Pink	Titanium Dioxide, Naphthole AS	77891, NA	PW6, PR213
20A	Purple	Titanium Dioxide, Naphthole AS, Quinacridone, Quinacridone	77891, 12490, 73900, 73915	PW6, PR5, PV19, PR122
20B	Magenta	Monoazo, Quinacridone, Carbon Black	12485, 73900, 77726	PR146, PV19, PBk7
20C	Blue Violet	Titanium Dioxide, Dioxazine, Phthalocyanine(x), Black Iron Oxide	77891, 51319, 74160, 77499	PW6, PV23, PB15:2 PBk11
20F	Red Violet	Titanium Dioxide, Dioxazine	77891, 51319	PW6, PV23
26A	Oxide Yellow	Titanium Dioxide, Iron Hydroxide, Monoazo	77891, 77492, 11767	PW6, PY42, PY97
26B	Raw Umber	Titanium Dioxide, Iron Oxide, Monoazo, Carbon Black	77891, 77491, 11767, 77726	PW6, PR101, PY97, PBk7

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Ref No.	Color Name	Chemical Name	Color Index Number	Color Index Name
26C	Raw Sienna	Titanium Dioxide, Iron Oxide, Monoazo	77891, 77491, 11767	PW6, PR101, PY97
26D	English Red	Titanium Dioxide, Iron Oxide	77891, 77491	PW6, PR101
26E	Vandyke Brown	Titanium Dioxide, Iron Oxide, Black Iron Oxide	77891, 77491, 77499	PW6, PR101, PBk11
26F	Burnt Sienna	Titanium Dioxide, Iron Oxide, Monoazo	77891, 77491, 21095	PW6, PR101, PY97
26G	Venetian Red	Titanium Dioxide, Iron Oxide, Black Iron Oxide	77891, 77491, 77499	PW6, PR101, PBk11
26H	Red Ochre	Titanium Dioxide, Iron Oxide, Iron Hydroxide, Azo Pigment	77891, 77491, 77492, NA	PW6, PR101, PY42, NA
26K	Burnt Umber	Titanium Dioxide, Iron Hydroxide, Iron Oxide, Black Iron Oxide	77891, 77492, 77491, 77499	PW6, PY42, PR101, PBk11
26L	Indian Red	Titanium Dioxide, Iron Oxide, Black Iron Oxide, Naphthole AS	77891, 77491, 77499, NA	PW6, PR101, PBk11, PR213
32A	Non-Color No.1	Titanium Dioxide, Carbon Black, Black Iron Oxide	77891, 77726, 77499	PW6, PBk7, PBk11
32B	Non-Color No.2	Titanium Dioxide, Black Iron Oxide, Ultramarine Blue	77891, 77499, 77007	PW6, PBk11, PB29
32C	Warm Grey	Titanium Dioxide, Iron Oxide, Black Iron Oxide	77891, 77491, 77499	PW6, PR101, PBk11
38B	Cobalt Blue	Titanium Dioxide, Phthalocyanine(x)	77891, 74160	PW6, PB15:2
38C	Ultramarine Blue	Titanium Dioxide, Ultramarine Blue, Phthalocyanine(x)	77891, 77007, 74160	PW6, PB29, PB15:2
38D	Prussian Blue	Titanium Dioxide, Phthalocyanine(x), Prussian Blue	77891, 74160, 77510	PW6, PB15:2, PB27
38E	Indigo	Titanium Dioxide, Phthalocyanine(x), Carbon Black	77891, 74160, 77726	PW6, PB15:2, PBk7
38F	Cerulean Blue	Titanium Dioxide, Phthalocyanine(x), Chlorinate Phthalocyanine	77891, 74160, 74260	PW6, PB15:2, PG7
38G	Ultramarine Light	Titanium Dioxide, Ultramarine Blue	77891, 77007	PW6, PB29
38J	Sky Blue	Titanium Dioxide, Ultramarine Blue, Phthalocyanine	77891, 77007, NA	PW6, PB29, PB68
45A	Emerald Green	Titanium Dioxide, Chlorinate Phthalocyanine, Monoazo	77891, 74260, 11767	PW6, PG7, PY97
45B	Permanent Green	Titanium Dioxide, Monoazo, Chlorinate Phthalocyanine	77891, 11767, 74260	PW6, PY97, PG7
45C	Turquoise Green	Titanium Dioxide, Prussian Blue, Monoazo, Chlorinate Phthalocyanine	77891, 77510, 11767, 74260	PW6, PB27, PY97, PG7
45D	Deep Green	Titanium Dioxide, Phthalocyanine(x), Chlorinate Phthalocyanine Disazo	77891, 74160, 74260, 21108	PW6, PB15:2, PG7, PY83
45E	Olive Green	Titanium Dioxide, , Monoazo, Chlorinate Phthalocyanine, Black Iron Oxide	77891, 11767, 74260, 77499	PW6, PY97, PG7, PBk11
45F	Oxide of Olive	Titanium Dioxide, Disazo, Prussian Blue, Iron Oxide	77891, 21108, 77510, 77491	PW6, PY83, PB27, PR101
45G	May Green	Titanium Dioxide, Monoazo, Chlorinate Phthalocyanine	77891, 11767, 74260	PW6, PY97, PG7
45H	Focus Green	Titanium Dioxide, Monoazo, Chlorinate Phthalocyanine Black Iron Oxide	77891, 11767, 74260, 77499	PW6, PY97, PG7, PBk11
45J	Viridian	Titanium Dioxide, Chlorinate Phthalocyanine, Black Iron Oxide	77891, 74260, 77499	PW6, PG7, PBk11
45K	Foggy Green	Titanium Dioxide, Monoazo, Chlorinate Phthalocyanine Black Iron Oxide	77891, 11767, 74260, 77499	PW6, PY97, PG7, PBk11
45L	Sap Green	Titanium Dioxide, Phthalocyanine, Disazo, Black Iron Oxide	77891, NA, 21108, 77499	PW6, PB68, PY83, PBk11

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Ref No.	Color Name	Chemical Name	Color Index Number	Color Index Name
1246-1	White	Titanium Oxide	77891	PW6
2	Yellow	Titanium Oxide, Monoazo	77891, 11710	PW6, PY3
3	Flesh Pink	Titanium Oxide, Isoindolinone, Perinone	77891, 56280, 71105	PW6, PY110, PO43
4	Pale Orange	Titanium Oxide, Pyrazolone, Disazo	77891, 21115, 21090	PW6, PO34, PY12
5	Chrome Yellow	Disazo, Disazo	21100, 21095	PY12, PY14
6	Salmon Pink	Titanium Oxide, Perinone	77891, 71105	PW6, PO43
7	Orange Yellow	Disazo, Disazo, Perinone	21100, 21095, 71105	PY13, PY14, PO43
8	Yellow Orange	Pyrazolone, Disazo	21110, 21090	PO13, PY12
9	Orange No. 1	Titanium Oxide, Naphthol AS, Pyrazolone	77891, 12315, 21110	PW6, PR22, PO13
10	Orange No. 2	Titanium Oxide, Naphthol AS, Pyrazolone	77891, 12315, 21110	PW6, PR22, PO13
11	Vermilion	Titanium Oxide, Naphthole AS	77891, 12315	PW6, PR22
12	Scarlet	Titanium Oxide, Naphthol AS, 4B-acid-Ca	77891, 12315, 15850:1	PW6, PR22, PR57:1
13	Red	Titanium Oxide, 2B-acid-Sr	77891, 15865:3	PW6, PR48:3
14	Crimson Lake	Titanium Oxide, 4B0-acid-Ca	77891, 15850:1	PW6, PR57:1
15	Deep Madder	Tobias acide-Ca, 4B-acid-Ca, Iron Oxide	15880:1, 15850:1, 77491	PR63:1, PR57:1, PR101

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Ref No.	Color Name	Chemical Name	Color Index Number	Color Index Name
16	Rose Pink	Titanium Oxide, Naphthole AS	77891, NA	PW6, PR213
17	Carmine Madder	Titanium Oxide, Naphthole AS, Pyrazolone	77891, NA, 21110	PW6, PR213, PO13
18	Rose Madder	Titanium Oxide, Naphthole AS, Pyrazolone	77891, NA, 21110	PW6, PR213, PO13
19	Grey Rose	Titanium Oxide, Monoazo, Iron Oxide, Phthalocyanine, Black Iron Oxide	77891, 12485, 77491, 774160, 77499	PW6, PR146, PR101, PB15:3, PBk11
20	Violet	Titanium Oxide, Quinacridone, Dioxazine	77891, 73915, 51319	PW6, PR122, PV23
21	Naples Yellow	Titanium Oxide, Perinone, Disazo, Disazo	77891, 71105, 21100, 21095	PW6, PO43, PY13, PY14
22	Pale Ochre	Titanium Oxide, Iron Hydroxide, Iron Oxide	77891, 77492, 77491	PW6, PY42, PR101
23	Pale Brown	Titanium Oxide, Iron Hydroxide, Iron Oxide, Black Iron Oxide	77891, 77492, 77491, 77499	PW6, PY42, PR101, PBk11
24	Ochre	Titanium Oxide, Iron Oxide, Disazo, Black Iron Oxide	77891, 77491, 21090, 77499	PW6, PR101, PY12, PBk11
25	Burnt Sienna	Titanium Oxide, Iron Hydroxide, Iron Oxide	77891, 77492, 77491	PW6, PY42, PR101
26	Brown	Titanium Oxide, Iron Oxide, Iron Hydroxide, Black Iron Oxide	77891, 77491, 77492, 77499	PW6, PR101, PY42, PBk11
27	Red Brown	Titanium Oxide, Iron Oxide, Naphthole AS	77891, 77491, NA	PW6, PR101, PR213
28	Burnt Umber	Titanium Oxide, Iron Hydroxide, Iron Oxide, Black Iron Oxide	77891, 77492, 77491, 77499	PW6, PY42, PR101, PBk11
29	Vandyke Brown	Titanium Oxide, Iron Hydroxide, Iron Oxide, Disazo, Carbon Black	77891, 77492, 77491, 21090, 77726	PW6, PY42, PR101, PY12, PBk11
30	Dark Brown	Iron Oxide, Monoazo, Black Iron Oxide, Iron Hydroxide	77491, 11710, 77499, 77492	PR101, PY3, PBk11, PY42
31	Black	Black Iron Oxide, Carbon Black	77499, 77726	PBk11, PBk7
32	Grey	Titanium Oxide, Carbon Black	77891, 77726	PW6, PBk7
33	Dark Grey	Titanium Oxide, Black Iron Oxide, Carbon Black	77891, 77499, 77726	PW6, PBk11, PBk7
34	Yellow Grey	Titanium Oxide, Iron Hydroxide, Carbon Black, Iron Oxide	77891, 77492, 77726, 77491	PW6, PY42, PBk7, PR101
35	Light Blue	Titanium Oxide, Phthalocyanine, Titan Yellow	77891, 74160, 77738	PW6, PB15:3, PY53
36	Pale Blue	Titanium Oxide, Phthalocyanine, Titan Yellow	77891, 74160, 77738	PW6, PB15:3, PY53
37	Sky Blue	Titanium Oxide, Phthalocyanine, Titan Yellow	77891, 74160, 77738	PW6, PB15:3, PY53
38	Blue	Titanium Oxide, Phthalocyanine(x), Ultramarine, Phthalocyanine	7891, 74160, 77007, 74160	PW6, PB15:2, PB29, PB15:3
39	Ultramarine Blue	Titanium Oxide, Ultramarine Blue	77891, 77007	PW6, PB29
40	Prussian Blue	Phthalocyanine(x), Prussian Blue	74160, 77510	PB15:2, PB27
41	Pale Green	Titanium Oxide, Chlorinate Phthalocyanine, Disazo	77891, 74260, 21090	PW6, PG7, PY12
42	Cobalt Green	Titanium Oxide, Phthalocyanine, Monoazo, Prussian Blue	77891, NA, 11710, 77510	PW6, PB68, PY3, PB27
43	Yellow Green	Titanium Oxide, Disazo, Disazo, Chlorinate Phthalocyanine	77891, 21100, 21095, 74260	PW6, PY13, PY14, PG7
44	Grass Green	Titanium Oxide, Disazo, Phthalocyanine	77891, 21090, NA	PW6, PY12, PB68
45	Green	Titanium Oxide, Disazo, Disazo, Chlorinate Phthalocyanine	77891, 21100, 21095, 74260	PW6, PY13, PY14, PG7
46	Green Gray	Titanium Oxide, Disazo, Disazo, Chlorinate Phthalocyanine, Carbon Black	77891, 21100, 21095, 74260, 77726	PW6, PY13, PY14, PG7, PBk7
47	Olive	Titanium Oxide, Disazo, Iron Oxide, Phthalocyanine	77891, 21090, 77491, 74160	PW6, PY12, PR101, PB
48	Deep Green	Titanium Oxide, Monoazo, Disazo, Prussian Blue	77891, 11710, 21090, 77510	PW6, PY3, PY12, PB27

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GENERAL INFORMATION

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Acknowledgement:

A special thank-you to **Peter Law** for the design and layout of this catalogue. His expertise as an artist and illustrator is well demonstrated. It was Mr. Law's concept that each Holbein color line be represented by one of his paintings.



Edward Peter Hopper
Founder, HK HOLBEIN INC.

Excellence, Perseverance and Courage are three synonyms that would aptly describe the founder of HK Holbein, E Peter Hopper. Born in Ottawa, Canada, Peter was educated at Lisgar Collegiate in Ottawa, Scots College in Sydney, Australia and McGill University in Montreal. He received the Governor General's Silver Medal in Accountancy in 1953. His hard work was rewarded with a partnership in a large, international accounting firm at a very young age. Peter, however, had his sights on different challenges. He was offered and accepted a posting from the United Nations as the Chief of the Audit Division for UNWRA in Beirut, Lebanon from 1960 to 1962....another life adventure for his young family.

He returned to North America in 1962 to assume the Presidency of Hughes-Owens Ltd., a Canadian company involved in engineering, drafting and art materials distribution. The company prospered under his direction and, in particular, further fostered his passion and love for the fine art material trade.

Never one to rest on his laurels, he left Hughes Owens and formed his own company Hopper Koch Inc. in 1977 in both Canada and the United States. Peter had met Mr. Thoru Yoshimura, President and Chairman of Holbein Art Materials from Osaka, Japan some years earlier and was impressed with the quality of their products. The Holbein ownership was also impressed with Peter's achievements and asked Peter to take the line to North America as their exclusive distributor. The company was renamed HK Holbein in 1980, to more closely identify the Company with its primary product line. HK Holbein is also a distributor of Strathmore Paper, Stratford & York, Educational Colors, General Pencil and a variety of other lines, all related to the art material trade.

Great friendships can often be the cornerstone for long and happy relationships. The strong bond between Peter and Thoru fostered a wonderful growth for both organizations. Today, Mineo Yoshimura has assumed the Presidency of Holbein Art Materials and the bond is further strengthened with Nobuo Yoshimura, President of Holbein Works. Two of Peter's sons, Douglas (President) and Timothy (Executive Vice President) now run HK Holbein and continue the close ties with Osaka.

No tribute to Peter would be complete without acknowledging the life long support and contributions of Peter's wife, Frances. In the early days, Frances was the anchor for the business when Peter traveled, introducing Holbein products to North America. Equally important to the growth of the company, Barbara MacKay, Vice President, continues to maintain vigilance over the Canadian operation. Finally, Kazumi Maesaka, Export Manager, Holbein Art Materials was and still is a friend to both generations of the Hopper family. Without their steady support, unfaltering loyalty and friendship, the company could not have prospered.

Peter and Frances proudly became U.S. citizens in the early 1990's. With their move to Florida in 1996, Peter was supposed to retire but true to his nature, remains active, as busy as ever as the Chairman of the HK Holbein Group of companies. The move has, however, allowed Peter to pursue his other passion in life.....painting. A Photo of one of his paintings appears in this new HK Holbein catalog.

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