High Flow								Search:		
Swatches	GOLDEN Name  Hansa Yellow Light	Pigment \$ Classification Organic	Color Index \$ Name	Color Index \$ Number	Chemical Description  Arylide Yellow	Opacity/Transparency N/A	Lightfastness <b>♦</b> Rating	Permanency Fair	Munsell Notation  Listing	Gloss ♦ Average
	Benzimidazolone Yellow Light	Synthetic Organic	PY175	11784	Benzimidazolone Yellow H6G	9	I - Excellent	Excellent	N/A	N/A
	Hansa Yellow Medium	Organic	PY73	11738	Arylide Yellow	N/A	Ĭ	Excellent	N/A	N/A
	Benzimidazolone Yellow Medium	Synthetic Organic	PY154	11781	Benzimidazolone Yellow H3G	N/A	I - Excellent	Excellent	N/A	N/A
	Nickel Azo Ye <mark>l</mark> low	Mixture	PY 150	12764	Nickel Complex Azo	N/A	I	Excellent	N/A	N/A
	Diarylide Yellow	Organic	PY 83	21108	Dairylide Yellow HR-70	N/A	Ĩ	Excellent	N/A	N/A
	Quinacridone/Nickel Azo Gold	Mixture	PO 48 PY 150	73900/ 73920/ 12764	Quinacridone Nickel Complex Azo	N/A	Ĭ	Excellent	N/A	N/A
	Pyrrole Orange	Organic	PO 73	561170	Dipyrrolopyrrol	N/A	N/A	Very Good	N/A	N/A
	Naphthol Red Light	Inorganic	PR 112	12370	Inorganic Napphthol AS-D	N/A	11	Very Good	N/A	N/A
	Quinacridone Red	Organic	PV 19	73900	Quinacridone	N/A	Ĭ	Excellent	N/A	N/A
	Quinacridone Magenta	Organic	PR 122	73915	Quinacridone	N/A	Ĭ	Excellent	N/A	N/A
	Alizarin Crimson Hue Permanent Violet	Mixture	PR 122 PR 206 PG 7	12370 73903 74260 69800	Quinacridone/ Quinacridone Chlorinated Copper Phthalocyanine	N/A	1	Excellent	N/A N/A	N/A N/A
	Dark Indigo Blue	Organic	PR 122	73915	Quinacridone	N/A	Ĭ.	Excellent	N/A	N/A
	(Anthraquinone)  Ultramarine Blue	Inorganic	PB 29	77007	Polysulfide of Sodium	N/A	Î	Not for exterior	N/A	N/A
	Cerulean Blue Hue	Mixture	PW 6 PB 15:1	77891 74160	- Alumino - Silicate  Titanium Dioxide  Rutile Copper	N/A	Ĭ	Excellent	N/A	N/A
	Phthalo Blue (Green Shade)	Organic	PB 15.1 PG 7	74160 74260 74160	Phthalocyanine Chlorinated Copper Phthalocyanine Copper Phthalocyanine	N/A	Ĭ	Excellent	N/A	N/A
	(Green Shade) Teal	Mixture	PW6 / PB15:3	77891 74160	Titanium Dioxide Rutile/ Copper	N/A	I	Excellent	N/A	N/A
	Turquoise (Phthalo)	Mixture	/ PG7 PB 15:3 PG 7	74260 74160 74260	Phthalocyanine/ Chlorinated Copper Phthalocyanine  Copper Phthalocyanine/	N/A	Ĩ	Excellent	N/A	N/A
	Phthalo Green (Blue Shade)	Organic	PG 7	74260	Chlorinated Copper Phthalocyanine  Chlorinated Copper Phthalocyanine	N/A	1	Excellent	N/A	N/A
	Permanent Green Light	Mixture	PY175, PG7, PW6	11784, 74260, 77891	Benzimidazolone Yellow H6G, Chlorinated Copper	N/A	I - Excellent	Excellent	N/A	N/A
	Green Gold	Mixture	PY150,	12764,	Phthalocyanine, Titanium Dioxide Rutile Benzimidazolone	N/A	I - Excellent	Excellent	N/A	N/A
	San Green II	Mivture	PG175. PY3	11784, 74265	Yellow H6G, Chlorinated Copper Phthalocyanine, Titanium Dioxide Rutile Brominated &	N/Δ	1	Event	NI/A	NI/A
	Sap Green Hue	Mixture	PG 36 PR 101 PY 150 PBk 7	74265 77491 12764 77266	Brominated & Chlorinated Copper Phthalocyanine/ Synthetic Red Iron Oxide/ Nickel Complex Azo/ Nearly	N/A	1	Excellent	N/A	N/A
	Yellow Oxide	Inorganic	PY 42	77492	Pure Amorphous Carbon Synthetic Hydrated Iron Oxide	N/A		Excellent	N/A	N/A
	Raw Sienna	Inorganic	PY 43	77492	Natural Iron Oxide	N/A	Ĭ	Excellent	N/A	N/A
	Burnt Sienna	Inorganic	PBr7	77491	Calcined Natural Iron Oxide	N/A	Ĩ	Excellent	N/A	N/A
	Sepia	Mixture	PR 101 PY 150 PBk 7	77491 12764 77266	Synthetic Iron Oxide/ Nickel Complex Azo/ Nearly Pure Amorphous Carbon	N/A	İ	Excellent	N/A	N/A
	Raw Umber	Inorganic	PBr 7	77492	Natural Iron Oxide containing Manganese	N/A	Ĩ	Excellent	N/A	N/A
	Carbon Black	Inorganic	PBk 7	77266	Calcined Natural Iron Oxide containing Manganese	N/A	I	Excellent	N/A	N/A
	Titan Buff  Titanium White	Inorganic	PW 6:1 / PW 6	77891 77891	Titanium Dioxide Rutile Titanium Dioxide	N/A	1	Excellent	N/A N/A	N/A
	Titanium White  Neutral Gray	Inorganic	PW 6	77891	Rutile  Titanium Dioxide	N/A	Ĩ	Excellent	N/A N/A	N/A
			PBk 9 PBr 7	77267 77491	Rutile Amorphous Carbon produced by charring animal bones Calcined Natural Iron Oxide					
	Transparent Hansa Yellow Med	Organic	PY 73	11738	Arylide Yellow GX	N/A	N/A	Fair	N/A	N/A
	Transparent Benzimidazolone Yellow Medium Transparent	Synthetic Organic Organic	PY154 PR 112	11781	Benzimidazolone Yellow H3G Napthol AS-D	N/A	I - Excellent	Excellent  Very Good	N/A N/A	N/A N/A
	Napthol Red Light  Transparent	Organic	PR 112	73900	Napthol AS-D  Quinacridone	N/A	1	Very Good  Excellent	N/A N/A	N/A N/A
	Quinacridone Red  Transparent	Organic	PV 23	51319	Carbozole Dioxazine	N/A	1	Very Good	N/A	N/A
	Dioxazine Purple  Transparent Phthalo Blue GS	Organic	PB15:3	74160	Copper Phthalocyanine	N/A	1	Excellent	N/A	N/A
	Transparent Phthalo Green BS	Organic	PG 7	74260	Chlorinated Copper Phthalocyanine	N/A	Ĩ.	Excellent	N/A	N/A
	Transparent Yellow Iron Oxide	Inorganic	PY 42	77492	Synthetic Iron Oxide	N/A	I	Excellent	N/A	N/A
	Transparent Red Iron Oxide	Inorganic	PR 101	77491	Sythetic Iron Oxide	N/A	1	Excellent	N/A	N/A
	Transparent Brown Iron Oxide	Mixture	PR 101 PBk 7	77491 77266	Synthetic Iron Oxide/ Nearly Pure Amorphous Carbon	N/A	1	Excellent	N/A	N/A
	Transparent Shading Gray	Inorganic	PBk 7	777266	Nearly Pure Amorphous Carbon	N/A	Ĭ	Excellent	N/A	N/A
	Fluorescent Chartreuse	Organic	N/A	N/A	Dyed Polymer Particles	N/A	N/A	Poor	N/A	N/A
	Fluorescent Orange	Organic	N/A	N/A	Dyed Polymer Particles	N/A	N/A	Poor	N/A	N/A
	Fluorescent Pink	Organic	N/A	N/A	Dyed Polymer Particles	N/A	N/A	Poor	N/A	N/A
	Fluorescent Blue	Organic	N/A	N/A	Dyed Polymer Particles	N/A	N/A	Poor	N/A	N/A
	Fluorescent Green	Organic	N/A	N/A	Dyed Polymer Particles	N/A	N/A	Poor	N/A	N/A
	Iridescent Copper (Fine)	Inorganic	N/A	N/A	Iron Oxide coated Mica particles Chlorinated Copper Phthalocyanine	3	N/A	Excellent	Hue N/A Value N/A Chroma N/A	More of a reddish appearance for a very convincing copper
	Iridescent Gold (Fine)	Inorganic	N/A	N/A	Titanium Dioxide & Iron Oxide coated Mica Particles	4	N/A	Excellent	Hue N/A Value N/A Chroma N/A	look. 35.19
	Iridescent Pearl (Fine)	Inorganic	N/A	N/A	Iron, Chromium, Nickel	3	N/A	Excellent	Hue N/A Value N/A Chroma	36.33
	Iridescent Silver (Fine)	Inorganic	N/A	N/A	Titanium Dioxide coated Mica Particles/ Nearly	3	N/A	Excellent	N/A Hue N/A Value N/A Chroma	37.66
					Particles/ Nearly Pure Amorphous Carbon				Chroma N/A	2.

## Lightfastness

The Lightfastness Ratings are provided by the American Society for Testing and Materials (ASTM) in the standard for "Artists' Acrylic Emulsion Paints". (ASTM D 5098, Annual Book of Standards, Volume 6.02). Colors with a Lightfastness Rating of I are considered Excellent ("Exc.") and those with a Lightfastness Rating of II are Very Good ("V.G."). Where Lightfastness Ratings have not been obtained according to ASTM test protocol, "N/A" is used. In those cases, data from pigment manufacturers and our own test facilities have been used and an appropriate description assigned under Permanency.

#### Lightfastness I: Excellent

Artist colors are let down with white to arrive at a pastel shade. These samples are exposed to an accelerated dose of of light energy equivalent to that which would be expected to occur during approximately 100 years of museum-lit conditions. This exposure is condensed into approximately 15 weeks of testing time, or less, depending upon the accelerated test methods used. For the purposes of the official test, before and after color difference is determined using a spectrophotometer, and difference units are mathematically calculated Less than 4 units color change earns a color the designation of Lightfastness I. In practicality, this means that a visual comparison of the unexposed and exposed samples, when held adjacent, would reveal, at worse, a barely perceptible color change.

## Lightfastness II: Very Good

Under the same test conditions, a visual comparison of adjacent unexposed and exposed samples will reveal a perceptible color change. This change will quickly become imperceptible to most observers as the sample pieces are moved apart from one another. When expressed mathematically, change falling within the range of 4-8 units is covered by this category.

## Perm

Lightfastness and durability based on our testing and manufacturer's data.

\*\* The identified colors are sensitive to a combination of moisture and UV radiation and are not recommended for outdoor use.

## Opacity/Transparency

We have determined that an eight-point scale is most appropriate for describing the properties of our colors. We have assigned each color in the chart a number from 1 (most opaque) to 8 (most transparent) to indicate the opacity/transparency of that color.

#### C.I. Name / C.I. Number

The Colour Index Name and Number are internationally recognized codes assigned to a particular "colorant" by both the Society of Dyers and Colourists and the American Association of Textile Chemists and Colorists. The C.I. Name consists of the category (type of dye or pigment), general hue and serial number, based on its chemical constitution. For example, PB 60, Anthraquinone Blue, indicates a specific Pigment Blue. The C.I. Number is a five-digit reference number assigned in the Colour Index based on the chemical structure of a colorant, regardless of usage class. For more information on these please see the following:

#### The Nomenclature of Color

# Туре

Designates whether the pigments used in a color are based on Organic or Inorganic chemistry. When containing both types, the term Mixed is used.

## Permanency

Exc. - Excellent

V.G. - Very Good

Poor

#### **Abbreviations**

- C.P. indicates concentrated cadmium pigments (CC).
- G.S. Green Shade
- B.S. Blue Shade
- R.S. Red Shade
- Y.S. Yellow Shade