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Where applicable, you can click on the artist paint or pigment [company code](#) found in the "Common Historic and Marketing Name Column" next to the pigments name. The links will take off site where you can find more specific paint, binder, and pigment properties, including MSDS sheets or a retailer that stocks that brand of paint or pigment. Just hit your back button to return. See the [Key](#) at the bottom of any page for the artist media or binder [company codes](#) and links to the brands websites. NOTE: *d* in italics indicates a discontinued paint or pigment, all other medium or binder codes in *italics* mean the pigment/paint is in the student grade, not the "artist's" professional premium paint. See the [Key](#) (at the bottom of the page) for artist media and [binder codes](#).


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Historic White Pigments and Mineral Pigments without Color Index Names

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Color Index Generic Name	CI Common or Historical Name	Common, Historic and Marketing Names	C.I. Constitution Number	Chemical Composition	Color Description † = Long Term Effects of Light	Opacity 1 = opaque 4 = trans.	Light Fastness I = excell. IV=Fugitive	Oil Absorption g/100g		Side Notes
N/A	Bone White	Bone Ash [KP.p]; Bone White <i>see Hartshorn</i>	N/A	Bone calcined in the presence of oxygen until all organic matter has been burned away. Mostly tribasic phosphate with traces of calcium carbonate and other salts.	off white	-	-	-	A MSDS	Used to prepare paper for silver point
N/A	Ceramic White	Ceramic White [HO.o.wo]; Strontium Titanate; Strontium Titanate Nano Powder; Tausonite*	N/A	Strontium Titanate; Titanic Acid Strontium	Bright pure white	1-2**	I	-	A	Modern pigment *Tausonite is a rare natural form found in siberia (Ref). **Not quite as opaque as Titanium White but more opaque than Zinc

										White
N/A	Diamond Powder	Diamond Powder [KP.p]	N/A	Powdered Diamonds	Translucent white	3-4*	I	-	A	* depends on binder medium.
N/A	Egg Shells	Eggshell White [KP.p]; Calx de tistis ovorum; Shell White	N/A	Powdered egg shells; mostly calcium carbonate; Brown eggs contain Ooporphyrin with a small amount of biliverdin with 2-3% eggshell pigment; (Ref)	White; light brown*; light blue*	1	I*	-	A	"an incomparable white that can not be surpassed by lead white or any other white in the world if it is made carefully and well" - <i>Secreti di Don Alessio Piemontese</i> (Secrets of Alessio Piemontese), 1557. (Ref) ; * Any coloring other than white is probably fugitive
N/A	Hartshorn	Hart's Horn; Hartshorn; Antler of Hart; Horn of hind <i>see Bone White</i>	N/A	The horn of the male European red deer Calcined in the presence of oxygen to burn off all organic matter and produce white; Chemically about 80% tribasic phosphate with some calcium carbonate. Other deer horns or bone may also have been used. <i>see Bone White</i>	"Earthy" White	-	-	-	A	MSDS Used for mixing with pigments that can't be mixed with lead white i.e. Orpiment, etc.; Calcined hartshorn is 'a useful earthy white for watercolors' according to Tingry (1830) . (Ref)
N/A	Lead Chloride Hydroxide	laurionite; Lead chloride hydroxide; Pattinson's White	77593	Lead chloride hydroxide	-	-	-	-	C	-
N/A	Lead Phosphite	lead Phosphite	77620	lead phosphite	-	-	-	-	C	Anti-corrosive
N/A	Lime White	Armenini's White; Bianco di San Giovanni [NP.p] ; Cennini's White; Lime White; Portlandite; Saint John's white	N/A	Mostly Calcium hydroxide with smaller amounts of Calcium Carbonate	bright white	1*	I	N/A	B	Excellent white for fresco (Ref) ; *transparency can depend on binder
N/A	Manganese Carbonate	Manganese Carbonate; Manganese White*?; Rhodochrosite	77733	Manganous carbonate; Manganese Carbonate (Ref wikipedia) ; Rhodochrosite (MnCO3) is a rare red Manganese Carbonate (wikipedia mineral Reference) ; CAS 598-62-9	Pink to almost white powder	-	-	-	A	*? The chemical Manganous carbonate (MnCO3), is said to be "Manganese White" by the Color index 3rd Ed., V.4. Inorganic colorants, under CI 77733 . However Manganous carbonate or Manganese Carbonate usually exists as pale pink to dark to bright red in both it's natural and synthetic forms.(see pictures of Rhodochrosite and Manganese Carbonate at wikipedia); <i>Magnesium</i> carbonate, (MgCO3), is quite white (see Magnesium carbonate and

										Magnesite), "Manganese White" is also a name for Manganese Sulphate
N/A	Oyster Shells	Shell White; Gofun; Gofun Shirayuki [KP.p]; Japanese Pearl White; Mother of Pearl [KP.p];	N/A	Powdered oyster shells; Mostly calcium carbonate in the form of an aragonite (Ref);	White may have a iridescence?	3	I	-	A	Has been used in Japan for centuries
N/A	Sodium Aluminium Silicate	Albite; Alumina White* [SCH.p]; Aluminosilicic acid, sodium salt; Aluminum Silicate; Aluminium Sodium Salt; Aluminum Sodium Silicate [SCH.p]; Fixwool; Jadeite; SODASIL®; Sasil; Sodium Aluminium Silicate; Sodium Aluminosilicate; Sodium Silicoaluminate; Sodium Silico Aluminate; Synthetic Zeolite; Zeolite	N/A	Sodium Aluminium Silicate; Manufactured by the precipitation of sodium silicate solution with aluminum sulphate. Not a specific compound but a group of related compounds consisting of sodium, aluminum, silicate and oxygen; Used in foods as anti caking agent;(Ref: wikipedia); Used in water based / acrylic emulsion paints, internal and external applications. Also it is a Defoaming agent , matting / Flattening agent, Thickening and Thixotropic agent, Free flow / anti-caking agent in powder coatings. (Ref: Madhu Silica - PDF); Used as a filler (extender) and as a white pigment in paints, printing inks and paper, where it acts as a partial substitute for titanium dioxide. (Ref: SODASIL® P95, IQE); chemically inert, non-toxic CAS 1344-00-9	Translucent White to greenish	2-3**	I	H	A	*Particularly suitable for use as a translucent filler in oil colors. Making colors "short" and "buttery". (Ref: Schmincke Pigment Info -PDF); **depends on binding medium, semi transparent in oils



Natural White - Color Index Name: NBr

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Color Index Generic Name	CI Common or Historical Name	Common, Historic and Marketing Names	C.I. Constitution Number	Chemical Composition	Color Description † = Long Term Effects of Light	Opacity 1 = opaque 4 = trans.	Light Fastness I = excell. IV=Fugitive	Oil Absorption g/100g		Side Notes

NW1	Guanine	C.I. Natural White 1; Dew Pearl; Essence d'orient; Fischsilber; Fish Silver [KP.p]; Guanin; Guanine; Guanine enol; Mearlmaid; Natural Fish Silver; Natural Pearl Essence; Naturon; Natural White 1; Pathocicin; Perlglanzmittel; Purine; Stella Polaris	75170	Guanin, Iminoxanthin, 2-Amino-6-oxypurin; Pearl essence extracted from scales of fish, mostly from herring and sardines.; CAS 73-40-5	Iridescent white to silver to yellow off white	4	-	-	A	Usually used to give iridescence or pearl lustre to other pigments (Ref)
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Pigment White - Color Index Name: PBr

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Color Index Generic Name	CI Common or Historical Name	Common, Historic and Marketing Names	C.I. Constitution Number	Chemical Composition	Color Description † = Long Term Effects of Light	Opacity 1 = opaque 4 = trans.	Light Fastness I = excell. IV=Fugitive	Oil Absorption g/100g		Side Notes
PW1	Lead White	Acrusite*; Basic Lead Carbonate ² ; Basic White Lead ² ; Berlin white; Biacca; Biacca di Venetia; Bly-spat; Body White; Ceruse [NP.p]; Ceruse White [NP.p]; Cerussa; Cerussa Native*; Cerussete; Cerussite ¹ ; Cerussite* (Natural Lead White) ¹ [NP.p]; C.I. Pigment White 1; Clichy White Lead; Corroded White Lead; Cremser White; Cremnitz White [OH.o WN.o]; Cremnitz White (Linseed Oil) [MH.o]; Cremnitz White (Walnut Oil) [MH.o]; Dutch Method White;	77597	White Lead (Ref wikipedia); Stack Process Lead White (Ref Natural Pigments); Lead Carbonate ² (Ref wikipedia); Basic Lead Carbonate (Ref); Lead Carbonate Hydroxide; Lead(II) Carbonate Basic; Lead Hydroxide Carbonate (Ref); Lead(2+) dicarbonate dihydroxide; "Lead carbonate is one of the compounds which can be named lead white. It is the synthetic analogue of the mineral cerussite", "Lead	Silvery white † Darkens, may be due to atmospheric sulfides	1-2	I	10-15	C MSDS¹ MSDS² MSDS³ ICSC NLM	May be slightly yellowish or off-white in oil paints due to binder.; May darken if exposed to sulfur fumes.; More stable in oil paints, the oil protecting it from exposer to the atmosphere.; Historical names referred to specific method or place of manufacture. Today these names are mostly just marketing terms although some pigment suppliers have genuine Ceruse, and Flake white (dutch process) still available in small batches, most notably Natural Pigments .

Dutch Process White;
Dutch White Lead;
Flake White [[BX.o](#) | [BR](#) | [KA.o.p](#) | [KP.p](#) | [MA.p](#) | [NP.p³](#) | [RGH.o.p](#) | [SE.p](#) | [UT.o](#) | [.o](#) | [WL.o\(SF\)](#) | [WVN](#)];
Flake White + Powdered Glass [[RGH.o](#)];
Flake White Extra Fine [[RGH.o](#)];
Flakelead;
Flemish White [[UT.o](#)];
Foundation White;
Genoa White;
Hamburg White;
Holland white;
Hydrocerussite;
Krems White;
Kremser White;
Kremniz White;
Kremnitz White;
Lead Salt;
Lead Spar
Lead Subcarbonate;
Lead White [[NP.p](#)];
Lead White #2 [[NP.p](#)];
London White;
Minium Album;
Nottingham White;
Neutral Lead Carbonate;
Pigment White 1;
Plumbous Carbonate;
Psmithium;
Roman White;
SF Flake White [[WL.o\(SF\)](#)];
Silver White [[HQ.o](#)];
Slate White;
Stack Process White Lead [[NP.p](#)];
Stack Process White Lead (Dutch Method) [[NP.p](#)];
Slate White;
Snowflake White;
Synthetic Hydrocerussite;
Venetian Ceruse;
Venetian White [[NP.p](#)];
Vienna White;
White lead²

white usually refers to Lead Carbonate Hydroxide (Basic Lead Carbonate, Lead(II) carbonate basic) or the natural form Hydrocerussite.

In addition 'lead white' may be extended to describe the lead chloride oxides, lead phosphates and particularly the lead sulfates" ([Ref Pigment Compendium p.228, p.239](#))

Cerussite¹ and Hydrocerussite are the natural mineral forms and may have some impurities. ([Ref wikipedia](#)); ([Ref galleries.com](#)); ([Ref google images](#)); ([Ref webmineral.com](#));

Hydrocerussite ([Ref mindat.org, and pic gallery](#)); ([Ref webmineral.com, Nice Pic here](#)); ([Ref pdf from handbook of mineralogy.org](#)); ([Ref pics at wikimedia.org](#));

Making pigments: lead white at [webexhibits.org](#)

In tests using spectroscopic analysis some brands of Lead White indicated as genuine or pure PW 1 are in fact be adulterated by Lead(II) sulfate, calcium carbonate, gypsum or chalk ([Reference: A Critical Analysis of Commercial Pigments, by M. Pérez, K. Castro, M.D. Rodríguez2, MA. Olazabal and J.M. Madariaga, University of the Basque Country, Dept. Analytical Chemistry and Dept. Painting.](#))

* Acrusite, Cerussite¹, Hydrocerussite are natural minerals.

Often adulterated with Blanc Fix as an extender and/ or to improve consistency (Ref [THE ARTIST'S HANDBOOK by Pip Seymour](#))

				<p>Cerussite: CAS 598-63-0;</p> <p>Hydrocerussite: CAS 1319-47-7</p> <p>Lead Carbonate²: CAS 598-63-0;</p> <p><u>Basic Lead Carbonate:</u> CAS 37361-76-5?</p> <p>Lead Carbonate Hydroxide (Basic Lead Carbonate. Lead(II) Carbonate Basic): CAS 1319-46-6</p>						
PW2	Lead Sulphate White	<p>Bartlett White Lead; C.I. Pigment White 2; Sublimed White Lead;</p> <p>Flemish White; Freeman's Lead; Freeman's White; Non-poisonous White Lead*; Patent White Lead; Pigment White 2; Purex White; Lead Bottoms; Lead Sulfate [NP.p]; Lewis White Lead; Silver Lead;; White Lead; White Lead Sulfate</p>	77633	<p>Tetrabasic Lead Sulfate (Ref Natural Pigments Blog);</p> <p>Basic Lead Sulphate plus Zinc Oxide;</p> <p>Lead oxide sulphates;</p> <p>CAS 7446-14-2</p>	Grayish to White	2	I	10-22	C*	<p>Some common names, chemical data, and pigment info is confusing or conflicting and seem to refer to PW2 and PW3 interchangeably.</p> <p>* Although less soluble than Basic Lead Carbonate (PW1), "Non- poisonous White Lead" (Tetrabasic Lead Sulfate PW2) is a toxic cumulative poison if ingested over a long period of time.</p>
PW3	Basic Lead Sulphate White	<p>Anglesite; Bleisulfat; Basic Lead Sulphate; C.I. Pigment White 3; Fast White; Flemish White; Freeman White; Freeman's White Lead; Lanarkite; Lead Bottoms; Lead Dross; Lead Sulfate; Lead Sulphate; Lead Vitriol; Milk White; Mulhaus White; Mulhouse White; Mulhouse White Lead; Natural Anglesite;</p>	77630	<p>Lead Sulphate; Natural Mineral Anglesite (Ref Pigment Compendium, 2008), (Ref Mineral at webmineral.com);</p> <p>lead salt of sulfuric acid;</p> <p>Lead(II) Sulphate; (Ref Pigment Compendium, 2008), (Ref Boston Fine Arts); (Ref Natural Pigments Blog);</p> <p>CAS: 7446-14-2</p>	Grayish to White	2	I	10-22	C	-

		Pigment White 3; Sulfate de plomb; Sulfate White Lead; Sulfuric Acid Lead Salt; White Lead								
PW4	Zinc Oxide White	Blanc de Zinc [LB.o]; Chinese White [AS DB.w DS.w LK MA.w.w RT.w WN.w.w.wp]; C.I. Pigment White 4; French White; Hubbocks White; Mixing White [WN.a]; Neo-Zinc White [HO.o]; Permanent Chinese White [MR.o SCH.w]; Permanent White; Pigment White 4; Sinopia Zinc White, transparent [SI.p]; Silver White; Snow Flowers; Snow White; Tint White [SE.a]; Transparent Mixing White [LQ.a]; Transparent Mixing White (Zinc White) [LQ.a]; Zinc Buff Yellowish* [WL.o.p]; Zinc Flowers; Zinc Oxide [GEN KA NP.p]; Zinc Mixing White [TA.a.af]; Zinc White [GEN BX.o.w CAS.k CH DB.o.w DR.o.o.t DS.a.o.p DV.k.o GB.o GO.a.af.ag.ao GR.o.o.w GU HO.o KA.o.p KP.p LB.o LK MA.a.a.g.o.o(artis).p MG.a.g.o MH.o MR.o MW.o OH.a.o PE.o RGH.o.p RT.o SCH.a.g.o.o(Mus).p SE.p.t SV UT.o WL.o.p WN.o.w]; Zinc White Oxide [GB.p]; Zink White [SCH]	77947	Inorganic; Zinc Oxide; Making pigments: How to make Zinc White at webexhibits.org ; CAS 1314-13-2, CAS 91315-44-5	Translucent white; *Zinc Buff Yellowish light pale yellow † Lightens slightly, becomes brittle	2	I BWS 8 (Lansco) BWS 8;8;8 (guerra paint)	10-22	A MSDS ICSC	Often Titanium White is mixed with Zinc White in artist's oil paints. Titanium White is said to be soft and "spongy" and Zinc White is said to be hard and "brittle". Together they supposedly cancel out each others cons.; New studies suggest zinc white may lead to premature cracking in oil colors (Ref), The studies may or may not pertain to mixtures with Titanium White in artist paints.
PW5	Lithopone	Albanol; Beckton White; Blanc de Titane [LB.o]; Cariton white; Charlton white; C.I. Pigment White 5; Diamond White; English White; Graves White; Griffith's White; Griffith's Patent Zinc White; Jersey Lily White; Knight's White; Lithopone [GEN KA.p KP.p SCH.p]; Lithopone Silver; Lithopone White [SE.p];	77115	Inorganic; "an insoluble mixture of barium sulfate and zinc sulfide that precipitates upon mixing solutions of barium sulfide and zinc sulfate. The precipitate is recovered by filtration, then calcined" (britannica.com Ref); "Complex co-precipitate, but not a compound, of calcium sulfate and zinc sulfide" (Ref Color index 3rd Ed.. V.4. Inorganic)	White	1-2	I	14	A	Sometimes used as a base for Lake pigments.; Added to artist, and so-called "designer" or "Illustrator" gouache paints to make a pigment more opaque and to lighten the hue, this is often not indicated on the art supply manufacturer's labels.; Often used as a extender in cheap white paints.;

		<p>Marbon White;</p> <p>Mixing White [SCH];</p> <p>Navin's White;</p> <p>Oleum white;</p> <p>Opaque White [LK];</p> <p>Orr's White;</p> <p>Orr's Zinc White;</p> <p>Porcelain White [WL.o(SF)];</p> <p>Pigment White 5;</p> <p>Ponolith;</p> <p>Ross' white;</p> <p>SF Porcelain White [WL.o(SF)];</p> <p>Snow White;</p> <p>Structure White;</p> <p>Sulphogen White;</p> <p>Transparent White [LA.a];</p> <p>White;</p> <p>White smalt;</p> <p>Zinc Baryta White;</p> <p>Zinc Mixing White [DR.a(s3hb).a(s3mb)];</p> <p>Zinc Sulfide [MA.p];</p> <p>Zinc White [DR.a.g HO.a.g WN.g]</p>		<p>colorants CI 77115);</p> <p>Barium sulfate (28 - 30%) and zinc sulfide (68 - 70%) with trace amounts of zinc oxide;</p> <p>CAS 1345-05-7</p>						<p>Used as a white pigment or adulterant in artist paints, student grade paints and many light colored artist convenience mixes especially in economy priced paints.</p>
PW6	Titanium White	<p>Aeroweiss DS [SCH];</p> <p>Anatase**;</p> <p>Antique White [HO.w(ant)];</p> <p>Buff Titanium [CAS.k DR.a.a.a(s3hb).a(s3mb).o(georg).o. DB.o];</p> <p>C.I. Pigment White 6;</p> <p>China white [PF.w];</p> <p>Chinese White [HO.ag.w MG.w SH.w];</p> <p>Chalk White;</p> <p>Double White [MA.o(HD)];</p> <p>Fast Drying Titanium White [CR.o];</p> <p>Flake White (Hue) [DV.k];</p> <p>Heavy Body White [SCH.a];</p> <p>Inorganic Oxide White;</p> <p>Kronos Titanium Dioxide;</p> <p>Mixing White [WN.a];</p> <p>Inorganic Synthetic Opaque White;</p> <p>Opaque White [LK SCH];</p> <p>Permanent White [DR.g HO.g.wo w WN.g];</p> <p>Permanent White EX [HO.o];</p> <p>Permanent White SF [HO.o];</p> <p>Pigment White 6;</p> <p>Primary White [HO.g];</p> <p>Quick-Dry White [HO.o];</p> <p>Quick Drying White [HO.o];</p> <p>Radiant White [GB.o];</p> <p>Santorini White [MA.o(Med)];</p> <p>SF Titanium White [WL.o(SF)];</p> <p>Sinopia Titanium White Rutile [SL.p];</p> <p>Super White [MA.o(artis)];</p>	77891	<p>Inorganic;</p> <p>Titanium Dioxide (Ref at Boston Fine Arts CAMEO);</p> <p>Anatase (natural Mineral) (Ref at Boston Fine Arts CAMEO);</p> <p>Titanium (IV) Oxide Anatase;</p> <p>Titanium (IV) Oxide Rutile;</p> <p>Titanium (IV) Oxide Brookite</p> <p>LBNLPigment Database Spectral radiative properties;</p> <p>Inorganic Oxide White;</p> <p>Titanium Dioxide White;</p> <p>Titanium White (i);</p> <p>Titanium White (ii);</p> <p>Making pigments: Titanium White at webexhibits.org;</p> <p>CAS 13463-67-7</p>	Purest White	1	I	18-30	A	<p>* Often Titanium White is mixed with Zinc White in artist's oil paints. Titanium White is said to be soft and "spongy" and Zinc White is said to be hard and "brittle". Together they supposedly cancel out each others cons. This Pigment Database only has artist paints or pigments that are single pigment and not mixed.</p> <p>The term Titanium White has been used for almost any white pigment containing titanium, according to M. Laver in her chapter on Titanium White, in the book Artists' Pigments: A Handbook of Their History & Characteristics, Vol 3, 1997.</p> <p>Some other pigments associated with the name Titanium White are Barium titanate, Lead Titanate, Potassium Titanate, Titanated lithopone,</p>

		<p>Tinting White [CR.ao.o];</p> <p>Titan Buff [GO.a.ab.ag.ao];</p> <p>Titanium Buff [GO.a GU];</p> <p>Titanium Dioxide [NP.p];</p> <p>Titanium Dioxide White;</p> <p>Titanium Opaque White [SCH.w];</p> <p>Titanium White* [GEN AS BX.o.w CAS.k CH CL CR.a(o).a.ao.o DB.a.a.ag DR.a.a(s3hb).a(s3mb).g.w.t DS.a.o.p.w DV.a.af.k.w EP.p GO.a.ab.af.ag.ao GU HO.a.ag.o.w.wo JO.a KA.ad.o.p LA.a LB.o LK LQ.a MA.a.a.o.p MG.a.w MR.o MT OH.a.o PF.o.o.w RGH.o.p RT.a.a.wo SCH.a.g.p SE.a.p.t SQ.a TA.a.af UT.a WL.o.o(SF).p WN.a.a.k.w.wp];</p> <p>Titanium White Dioxide [GB.p];</p> <p>Titanium White Extra Opaque [OH.a];</p> <p>Titanium White No. 1 [MH.o];</p> <p>Titanium White No. 3 (with driers) [MH.o];</p> <p>Titanium White (opaque) [HQ];</p> <p>Titanium White (Opaque White) [WN.w.wp];</p> <p>Titanium White Rutile [KP.p];</p> <p>Titanox;</p> <p>Translucent White [SCH.o];</p> <p>Transparent Titanium White [GU RT.w];</p> <p>Unbleached Titanium [RGH.o.p SQ.a TA.a.af WL.o.p];</p> <p>Warm White [SQ.a TA.a.af];</p> <p>White [AS DR.a HO.af LA.a MA SE];</p> <p>White Permanent [MW.wo];</p> <p>White (Titanium) [DV];</p> <p>XSL Titanium White;</p> <p>Zinc White Imitation [PF.o];</p>								Titanium lithopone, Titanium phthalate, Titanium silicate and Zinc titanate.
PW6:1	Titanium White Buff	<p>Buff Titanium [DR DS.a.o.p.w KP.p];</p> <p>Buff Titanium Gray [CAS.k];</p> <p>Buff Titanium Light [CAS.k];</p> <p>Buff Titanium, natural titanium dioxide [KP.p];</p> <p>Buff Titanium Oxide;</p> <p>Ceruse (hue) [MA.o(Ren)];</p> <p>Chinese White [GR.w];</p> <p>C.I. Pigment White 6:1;</p> <p>Hitox Buff Titanium Oxide;</p> <p>Natural Titanium;</p> <p>Natural Titanium Dioxide;</p> <p>Pigment White 6:1;</p> <p>Titan Buff [GO.a.ab.af.ag.ao];</p> <p>Titanium Buff [GO.a.ab.af.ag.ao GU SI.p];</p> <p>Titanium White [DB.w GR.a.w];</p> <p>Titanium White Buff;</p> <p>Unbleached Titanium [WL.o];</p>	77891	<p>Inorganic; Natural Titanium, Titanium Dioxide and Ferric Oxide bound together with other metallic oxides;</p> <p>TiO₂</p> <p>CAS 13463-67-7</p>	Off White	1	I	33-35	A	-

		Unbleached Titanium Dioxide [MH.o]; Unbleached Titanium Pale [WL.o]								
PW7	Zinc Sulphide White	Chinese White; C.I. Pigment White 7; Matting; Opaque White [SCH.o]; Pigment White 7; Sphalerite; Wurtzite; Zinc blende; Zinc Buff [WL.o]; Zinc sulfide [KP.p; MA.p]; Zinc Sulphide White; Zinc White[RT.a.g WL.o];	77995 77975	Inorganic; Zinc Sulphide White; CAS 1314-98-3	White to yellowish	1-2*	I	11-13	A**	Phosphorescent and electroluminescent properties, often used to make fluorescent and glow-in-the-dark paints; "It is often used for "invisible ink" that glows with exposure to ultraviolet light."- Dick Blick site reference ; *Transparency increases the smaller the particles; **may have traces of lead
PW8	Strontium sulfide	C.I. Pigment White 8; Strontium Sulfide	77847	Strontium sulfide; Strontium sulfide is fluorescent and phosphorescent. The initial brightness of strontium sulfide type phosphors is lower than that of the zinc sulfide type, and the duration of afterglow is longer.	phosphorescent	-	-	-	-	-
PW10	Barium Carbonate	Barium Carbonate; Barium Monocarbonate; Barium Salt; Carbonic Acid; C.I. Pigment White 10; Cocks Comb Spar; Durex White Pigment White 10; Ponderous Spar; Witherite	77099	Barium Carbonate, A heavy white powder that occurs in nature as the mineral witherite (Ref at Boston Fine Arts CAMEO Art Materials Database); CAS 513-77-9	White powder	3	-	15-25	D* MSDS ICSC	*used as rat poison, forms barium chloride in the presence of stomach acid
PW11	Antimony White	Algarotti White; Antimonious Oxide; Antimony(III) Oxide; Antimony Bloom; Antimony Oxide; Antimony Peroxide; Antimony Sesquioxide; Antimony Trioxide; Antimony White; C.I. Pigment White 11; Exitelite;	77052	Antimony(III) oxide; Antimony Oxide; Antimony Peroxide; Antimony Sesquioxide; Antimony Trioxide (Ref at Boston Fine Arts CAMEO Art Materials Database); Antimony White	Powder white	1	I	8-12	C ICSC	May be darkened by hydrogen sulfide

		Flowers of Antimony; Pigment White 11; Senarmonite; Timonox; Valentinite (natural mineral); White Antimony; White Star Timonox;		(Ref at Boston Fine Arts CAMEO Art Materials Database); CAS 1309-64-4						
PW12	Zirconium Oxide	Baddeleyite; C.I. Pigment White 12; Zircon White; Zirconium Oxide	77990	Zirconium Oxide Baddeleyite is the natural mineral. (Ref Pigment Compendium, 2008).	-	-	-	-	-	-
PW13	Barium Tungstate	Barium Tungstate; Barium White; Barium wolframate; C.I. Pigment White 13; Pigment White 13; Tungstate of Baryta; Tungstate White; Tungsten white; Wolfram white	77128	Barium Tungstate; CAS 7787-42-0	White	-	I	-	C	-
PW14	Bismuth Oxychloride	Bismuth White; Bi-Flair; Biluna Bismuth Oxy; Blanc d'Espagne; Blanc de Perle; Chloride Crystals; C.I. Pigment White 14; Liquid Mirror [TA.a.af]; Magistery of Bismuth; Pigment White 14	77163	Bismuth Chloride Oxide; Bismuth Oxychloride; CAS 7787-59-9	Silvery white with pearlescent or iridescence properties	-	-	L	A*	Often used in cosmetics to produce pearlescent shine; Often used to add metallic or pearlescent properties to paints.; *Can cause allergies and other claimed skin problems when used as cosmetic
PW15	Tin Oxide	Cassiterite; C.I. Pigment White 15; Flowers of Tin; Flowersoftin; Pigment White 15; Stannic Anhydride; Stannic Oxide; Stannous Oxide; Tin Dioxide; Tin Oxide; White Tin Oxide	77861	Tin(IV) Oxide; Tin Monoxide; Tin III Oxide; Tin Dioxide; Tin Oxide; Ttin Peroxide (Chemical references) Cassiterite (natural tin oxide ore) - mindat.org (Ref); CAS 18282-10-5]	white to gray with slight pearlescent sheen	1	I	-	A* MSDS	Used to give subtle pearlescent properties to artist paints and pigments; Used in ceramic glazes; Used as a polishing agent for glass and metals; * Respiratory irritant, wear a mask when working with dry pigment.
PW16	Lead Silicate	Alamosite; Basic Lead Silicate; Basic Silicate White Lead; C.I. Pigment White 16; Lead Bisilicate; Lead Frits; Lead Metasilicate;	77625	Alamosite is the natural mineral (Ref); Fused Silica sand and Litharge (Ref); CAS 10099-76-0	White	1	-	L	C	-

		Lead Monosilicate; Lead-m-silicate; Lead Silicate; Lead White Pigment White 16								
PW17	Bismuth Subnitrate	Bismuth Nitrate; Bismuth Subnitrate; Bismuth Subnitricum; Bismuth White [KP.p]; Bismuthyl Nitrate; Bismuth Oxynitrate; Bismuth Yellow; Blanc de fard; Bougival White; C.I. Pigment White 17; Magistery of Bismuth; Novismuth; Paint White; Pearl White; Pearl White Bismuth Nitrate Oxide [KP.p]; Pigment White 17; Spanish White; Subnitrate of Bismuth	77169	Basic Bismuth Nitrate; Bismuth hydroxide nitrate oxide; CAS 10361-44-1; CAS 54392-33-5	Pearlescent white; Microcrystalline powder	1	II	L	A*	May be darkened by hydrogen sulfide, May yellow (Ref Color index 3rd Ed., V.4, Inorganic colourants CI 77169); Was formerly used as an antacid and wound dressing (Ref). *Can cause allergies and other claimed skin problems when used as cosmetic
PW18	Chalk	Aragonite [KP.p]; Alba Albula [KP.p]; Alabaster White; Aragonite; Bianco Carrara White Marble Dust [NP.p]; Bianco di Sangiovanni; Bianco san Giovanni; Biancho Secco; Bianco Verona White Marble Dust [NP.p]; Bologna Chalk [NP.p]; Calcite [NP.p]; Calcite White [KP.p]; Calcium Carbonate; Carrara marmor dust [KP.p]; Carrara Marble, White [KP.p]; Chalk [GEN NP.p]; Chalk from Bologna [KP.p]; Chalk from Champagne [KP.p]; Chalk from Ruegen [KP.p]; C.I. Pigment White 18; Coarse calcium carbonate chalk [KA]; Colourless [RT]; English White; Extra-fine calcium carbonate chalk [KA]; Gilders Gesso; Gilders Whiting; Grey Chalk from Sarti [SI.p]; Lime White;	77220 + 77713	Inorganic; Natural Calcium carbonate with Magnesium carbonate as an impurity; Making pigments: lime white at webexhibits.org CAS 471-34-1	White to cream/blue/gray off white	1-4*	I	15-20	A MSDS	Can be affected by acids; Used to neutralize acids in artist papers and painting conservation; Generally used as extender, thickener, matting agent in artist paints and to add tooth to oil paint and acrylic gesso and primers; Added to watercolors to make Gouache in artist, designer and illustrator paints. Used to make watercolor gouache paints matte and more opaque, but usually not indicated on the art suppliers literature; Promotes thru drying and other claimed benefits to an oil paint film, see Calsite Sun Oil and Chalk

		<p>Limestone; Marble; Marble Dust [GEN DS.p EP.p KP.p SI.p UT]; Marble Dust Italian [KP.p]; Marble Flour [EP.p]; Marble Flour Extra Fine [EP.p]; Marble Meal [EP.p]; Paris White; PCD French Chalk [SI.p]; Pigment White 18; Powdered Marble [SCH]; Saint John's White; Sarti Chalk Greyish [KP.p]; Stone Chalk [KP.p]; Tailor's Chalk; Travertine; Troy White; Troyes White; Veroneser White [KP.p]; Veronese White Marble[KP.p]; White Chalk [KP.p]; White Earth from Carrara [MA.o]; Whiting [GEN GB.o.p SI.p]; Whiting Chalk [EP.p]; Yellow Chalk from Sarti [SI.p]</p>							<p>Putty. More info on Calsite mediums from NP. ; Added to lead white to make the soft translucent mixing white Ceruse (Ref); Marble (chalk) in solid form is used for sculpture, pottery, architecture and many other arts. * Opaque in water media, but nearly transparent in oil Binder.;</p>	
PW18	Precipitated Chalk	<p>C.I. Pigment White 18; Calcium Carbonate [KP.p]; Calcium Carbonate Coarse [KA.p]; Calcium Carbonate CP; Calcium Carbonate Extra fine [KA.p]; Calcium Carbonate (precipitated chalk) [GU]; Calcium carbonate (USP); Calcium monocarbonate; Calcium trioxidocarbonate; Marly White [SE.p]; Pigment White 18; Powdered Marble [SCH.p]; Levigated chalk; Precipitated Chalk [DS.p]. <i>Also all the names above for natural chalk are often used.</i></p>	77220	<p>Pure Calcium Carbonate; CAS 471-34-1</p>	White	1-4*	I	55	A MSDS	See above for artist uses.
PW18:1	Dolomite	<p>Ankerite; Aragonite; Calcite; C.I. Pigment White 18:1; Dolomite [KP.p]; Dolomitic Limestone; Egyptian Dolomite; Huntite; Magnacite; Pearl Spar;</p>	77220:1 + 77713:1	<p>Inorganic; Natural Calcium carbonate with Magnesium carbonate; Mineral (Ref); (Ref); (Ref); As pigment (Ref); Making pigments: lime white at webexhibits.org</p>	White to pale pink to yellowish white	1-4*	I	12 –14	A MSDS	* Nearly transparent extender in oils

		Pigment White 18:1; Spanish White [KP.p]; Sugar Dolomite [KP.p];		CAS 7000-29-5; CAS 546-93-0						
PW19	Kaolin	Aluminum Silicate Hydroxide; Argilla; Bentone; Bentonite [KP.p]; Bolus Alba; Brick Dust; Caolin; China Clay [DS.p; KP.p]; China clay, kaolin [KA]; C.I. Pigment White 19; Devonshire Clay; Electros; English Caolin; Hydrated Aluminium Silicate Kaolin [GU]; Kaolinite; Natural White Earth [KP.p]; Neokaolin; Organoclay [NP.p]; Paper Clay; Pipe Clay; Pyrophyllite; Pigment White 19; Porcelain Clay; Supreme White; Vicenza Earth [NP.p]; White Bole; White Bolus; White Heart; White Kaolinite [NP.p];	77004 77005	Inorganic; White Clay Rock, mostly natural hydrated Aluminium Silicate with Impurities of Magnesium, Iron carbonates, Ferric hydroxide, Mica, Quartz-sand, etc. (Ref Colorindex 3rd Ed., V.4, Inorganic colourants CI 77004) Kaolin (Ref at Boston Fine Arts CAMEO Art Materials Database); *** Organoclay is a derivative of a bentonite. CAS 8047-76-5	Bright White; can have blue, green, red, orange or brown undertones*	1-4**	I	26 - 55***	A MSDS MSDS ICSC	* Calcined Kaolin produces whiter shades.; ** Opacity depends on manufacture, binder and other mineral properties.; *** Oil absorption varies some by manufacture method & particle size. Purity and other natural mineral properties may have some effects. see inert pigments
PW20	Mica	Biotite; C.I. Pigment White 20; Fine Mica [GU]; Gold Coarse Mica [GU]; Glimmer White; Interference Blue [OH.a?*]; Interference Green [OH.a?*]; Interference Lilac [OH.a?*]; Interference Red [OH.a?*]; Iridescent Pearl White [WL.o]; Iridescent White [MA.p]; Lepidolite; Metallic White [HO.ag]; Mica [GEN]; Mica Powder [Sl.p]; Mica Titanate; Mica White [KP.p]; Moon White [MA.o(HD)]; Mother Of Pearl [IA.a.af]; Muscovite;	77019	Inorganic; Hydrous Aluminium Potassium Silicate; Mica Titanate (micronized mica flakes); "a type of natural quartz, which occurs in the form of compressed thin sheets or plates that divide easily" (Ref THE ARTIST'S HANDBOOK by Pip Seymour); $H_2KA_{13}(SiO_4)_3$ CAS 12001-26-2	Translucent pearlescent or shimmering off-white	4	I	45-50	A MSDS	Adds metallic, iridescent and pearlescent properties to paints.; Natural Mica and larger particles may harm oil paint film, very fine particles and micronized Mica Titanate is more suitable for oil (Ref). ?* may have small amount of other pigment added for tint.

		<p>Muscovite Mica [KP.p]; Muscovite Mica, brilliant[KP.p]; Muscovy Glass; Natural Mica, Perlescent Powder [KA.p]; Pearl Blue [HO.a]; Pearl Lustre; Pearl White [HO.a.g]; Pearlescent White; Phlogopite; Pink Mica [GU]; Pigment White 20; Russet; Silver [HO.w]; Stardust Blue [MA.o(HD)?*]; Stardust Purple [MA.o(HD)?*]; Super Sparkle White Mica Powder [EP.p]; Titanated Mica; Toning Grey Mid [CR.ao.o]; White Coarse Mica [GU]; White Fine Mica [GU]; White Medium Mica [GU]; White Muscovite; Zinnwaldite;</p> <p><i>Also many colors with Iridescent, Pearl, or Metallic prefix or suffix.</i></p>								
PW21	Barium Sulfate (Synthetic)	<p>Artificial Barite; Barite [NP.p]; Barium Sulfate [KA]; Barium White; Baryta White; Blanc Fixe [KP.p SCH.p]; C.I. Pigment White 21; Constant White; Hepatite; Italian Gesso [NP.p]; Permalba; Pigment White 21; Pigment White 22 (natural); Precipitated Barium Sulphate; Sulfate de Baryum; Sulfato de Bario; Synthetic Barium Sulfate; Tyrol White</p>	77120	<p>Inorganic; Synthetic Barium Sulfate: used as a white pigment, more often as as an extender or adulterant.</p> <p>The natural mineral baryte is roasted with coal, burning off the carbon monoxide and sulfur dioxide. The product is then dissolved in water and filtered. The pure barium sulfate can then be precipitated out with sodium sulfate. (Ref Pigment Compendium, by Nicholas Eastaugh, Valentine Walsh, Tracey Chaplin and Ruth Siddall, Copyright © 2008, p.44-45);</p> <p>Barium Sulfate (Ref at Boston Fine Arts CAMEO Art material Database);</p>	White	2-3*	I	15-25	A** ICSC	<p>*Used as an filler, extender, to improve handling, increase opacity (in watercolor and gouache), and/or adulterant in oil colors.;</p> <p>Barium Sulfate or Blanc Fix is very heavy and when used in paints may make the tube feel heavy. Because of that it is often used to adulterate Lead White, or added to paints as a adulterant filler simulating a high pigment load (Ref THE ARTIST'S HANDBOOK by Pip Seymour);</p> <p>Used as a base for more opaque lake pigments;</p> <p>** Pure Barium Sulfate is not soluble so it is safe, but poorly made synthetic Barium Sulfate may have free soluble barium</p>

				CAS 7727-43-7						compounds as impurities that are very poisonous (Ref). I Recommend only getting from a reliable source. <i>see inert pigments</i>
PW22	Barytes (Natural Barium Sulfate)	Barite [NP.p]; Baryta White; Baryte; Barytes; Basofo; Bologna Stone; Bolognian Spar; Bologna white; Calk; Cauk; Cawk; C.I. Pigment White 22; Heavy Spar; Mineral White; Natural Barium Sulfate; Pigment White 21; Pigment White 22; Ponderous Spar; Sulfate de Baryum; Sulfato de Bario; Tiff; Tyrol white <i>Also see Pigment White 21 above</i>	77120	Inorganic; Natural Barium Sulfate: Usually white or off white, impurities may tint it a wide variety of colors. (Ref Pigment Compendium, by Nicholas Eastaugh, Valentine Walsh, Tracey Chaplin and Ruth Siddall, Copyright © 2008, p.46); Natural Barium Sulfate Ore (Pigment White 22) (Ref: Natural Pigments); Barite (Ref at Boston Fine Arts CAMEO Materials Database); CAS 7727-43-7	White to off white	2-3*	I	11	A**	Used as an filler, extender, to improve handling, increase opacity (in watercolor and gouache), and/or adulterant in oil colors. Also used as a base for more opaque lake pigments; Barium Sulfate or Blanc Fix is very heavy and when used in paints may make the tube feel heavy. Because of that it is often used to adulterate Lead White, or added to paints as a adulterant filler simulating a high pigment load (Ref THE ARTIST'S HANDBOOK by Pip Seymour); ** Barium Sulfate is not soluble so it is safe, but poorly made Barium Sulfate, or raw natural Barium Sulfate may have impurities or free soluble barium compounds that are very poisonous (Ref)
PW23	Alumina Blanc Fixe	Alum; Alumina Blanc Fixe; Aluminium Hydrate; Blancopone; C.I. Pigment White 23; Gloss White; Pigment White 23	77122	Aluminum hydrate, Barium sulfate; Coprecipitate of about. 25% aluminium hydroxide and 75% barium sulfate (Ref Color index 3rd Ed., V.4. Inorganic colorants, chemical constitution number CI 77122); used as "clear oil colour" (Ref Color Index Third Ed)	White Crystalline Powder	-	I	-	A** ICSC	** Barium Sulfate is not soluble so it is safe, but poorly made Barium Sulfate may have free soluble barium compounds that are very poisonous (Ref)
PW24	Aluminium Hydroxide	Alumina; Alumina Hydrate [KA.p];	77002	Aluminum Hydroxide can have varying	Translucent White powder*	3-4**	I	33-55***	A MSDS	*see inert pigments

		<p>Alumina Trihydrate; Aluminum Hydrate; Aluminum Hydrate White; Aluminum Hydroxide¹; Aluminum Hydroxide Fine [KP.p]; Aluminum Hydroxide Medium [KP.p]; Aluminum Oxide Trihydrate; Aluminum Trihydrate [NP.p]; Aluminum White; C.I. Pigment White 24; Gloss White; Hydrated Alumina; Hydrated Aluminum Oxide; Transparent Blender [DS.o]; Transparent White; Trihydroxyaluminum; Alumina White; Pigment White 24</p>		<p>amounts of basic aluminium sulfate (Ref Colorindex 3rd Ed., V.4, Inorganic colourants CI 77002); Alumina Trihydrate (Ref at Boston Fine Arts CAMEO); Aluminum hydroxide, is a metallic salt and soap of aluminum. CAS 21645-51-2</p>					<p>ICSC¹</p> <p>**Transparent in oils</p> <p>*** Oil absorption depends on particle size</p> <p>One of the most common metallic bases for precipitating dyes to make lake pigments (Ref).</p> <p>Often used as a filler, extender and adulterant to increase volume of a paint or pigment. Used this way it lowers the tinting strength of the mixed pigment. In the case of very strong colors like the Phthalo's it is not considered an adulterant, it is also added in small amounts to improve paint handling.</p> <p>Very often it is used to greatly extend pigments in cheaper paints and pigments where it is considered an adulterant. Overuse may cause some yellowing and darkening in oil paints. (Ref The Artist's Handbook by Pip Seymour); (Ref The Artist's Handbook by Ralph Mayer)</p>	
PW24	Gibbsite (Natural form of Aluminum Hydroxide)	<p>Aluminum Hydroxide; Bayerite; Boehmite; C.I. Pigment White 24; Diaspore; Doyleite; Gibbsite; Hydrargillite; Natural Aluminum Hydroxide; Nordstrandite Pigment White 24</p>	-	<p>Natural Aluminum Hydroxide with varying amounts of basic aluminium sulfate CAS 21645-51-2</p>	Brown tinted Translucent Flakes	4	I	33	A	<p>Can be used the same as Aluminum Hydroxide, but may could have impurities and be more opaque or off color in artist paints.</p>
PW25	Gypsum	<p>Anhydrous sulfate of lime**; Alabaster [NP.p]; Alabaster Gypsum; Alabaster White [KP.p];</p>	77231	<p>Inorganic; Hydrated calcium sulfate (Ref); (Gypsum Ref at Boston Fine</p>	White	1-3*	I	18-22	A	<p>*Nearly transparent in oils used as an extender, filler and/or adulterant;</p>

		Albarine; Annalin**; Atlas Spar; Bologna White; C.I. Pigment White 25; Crown Filler; Gesso; Gypsum; Lady's Ice; Light Spar; Mineral White; Magnesia White?; Native Calcium Sulfate; Natural Gypsum; Natural Calcium Sulfate; Natural Sulfate of Lime; Pigment White 25; Plaster of Paris**; Precipitated Calcium Sulfate; Puritan Filler; Satin Spar; Silk Spar; Selenite; Specular Stone; Sulfate of Lime; Terra Alba [DS.p; KP.p NP.p];		Arts ; (Alabaster Ref at Boston Fine Arts); CAS 91315-45-6 CAS 10101-14-4 ** Anhydrous form of calcium sulfate or calcined gypsum						Used in traditional artists gesso.; May make brittle gesso? (Ref); High quality pure Calcium Sulfate Terra Alba available from Natural Pigments . Alabaster Natural Hydrated Calcium Sulfate also from Natural Pigments
PW26	Talc	Agalite; Alberene® Soapstone; Asbestine; C.I. Pigment White 26; French Chalk [DS.p]; Lard Stone; Mistron®; Nicon®; Pigment White 26; Pot Stone; Steatite; Soapstone; Spanish Chalk; Tailors Chalk; Tak; Talc [GU KA.p]; Talcum [SCH.p]; Talcum Powder [SI.p]; Talcum White [KP.p]; Talk; Vertal;	77718 + 77019	Inorganic; Mixed Hydrated Silicate of Magnesium with varying impurities of Calcium, Iron and other compounds; Hydrated Magnesium Silicate (Ref Boston Fine Arts); CAS 14807-96-6 CAS 8005-37-6	Slightly off white to light grey	1-3*	I	30 - 45	A MSDS ICSC	*Nearly transparent in oils used as an extender, filler and to change rheological properties of paints Provides for good colour consistency in aqueous binders. The dried colour becomes slightly water-repellent (Ref: Schmincke Pigment Info - PDF);
PW27	Silica	C.I. Pigment White 27; Cristobalite Powder [KP.p]; Diatomaceous Earth [GU]; Diatomaceous Silica; Diatomic Earth; Diatomite; Fossil Flower;	77811	Inorganic; Two types: Hydrous = diatomaceous earth; Anhydrous = silica (Ref Color Index	White to off white	1-4*	I	L	A	Used mostly to add tooth or texture; *Transparency depends on binder and particle size, also the crystalline structure.


		Fuller's Earth; Infusorial Earth; Microdol; Mountain Crystal [KP.p]; Pigment White 27; Precipitated amorphous silica; Rock Crystal [KP.p]; Silica; Silicon Dioxide; Sand; Tripoli; Quartz; Quartz Powder [KP.p]; Tripolite;		Third Ed); Silicon Dioxide (amorphous) or anhydrous silica is pure chemical form; Natural Diatomaceous Earth is the Hydrous form made up of the fossilized skeletal remains of aquatic plants called diatoms (Ref); CAS 7631-86-9						
PW28	Calcium Silicate	Anhydrite; Calcium Silicate; Calcium Metasilicate; C.I. Pigment White 28; Baysical K; Pigment White 28; Wollastonite (mineral)	77230	Inorganic; Calcium Metasilicate; Calcium Silicate; CAS 10101-39-0; CAS 10101-41-4; CAS 13397-24-5; CAS 26499-65-0; CAS 7778-18-9	White to light cream	2-3*	I	M	A	*Depends on binder and particle size
PW28	Hydrated Calcium Silicate	C.I. Pigment White 28; Hydrated Calcium Silicate; Pigment White 28;	77230	Inorganic; Hydrated Calcium Silicate	Bright White	4	I	H	A	-
PW 30	Lead Phosphate	C.I. Pigment White 30; Lead Phosphate; Pigment White 30	77622	Lead Phosphate	-	-	-	-	C	-
PW32	Zinc Phosphate	C.I. Pigment White 32; Delta Zinc Phosphate; Pigment White 32; Zinkphosphate ZP 10	77964	Inorganic; Pure Zinc Phosphate; CAS 7779-90-0	White	1	I	-	A	-
PW33	Calcium Sulfoaluminate	C.I. Pigment White 33; Calcium sulfoaluminate; Pigment White 33;	7 7235	Calcium sulfoaluminate	-	-	-	-	-	-



[Pigment](#) | [Iron Oxide Pigment](#) | [White Mineral Oil](#) | [White Acrylic Paint](#)

PAINT AND PIGMENT REFERENCE TABLE KEY: [Page Top^](#)

Jump to : [Supplier/Manufacturer Codes](#) | [Binder/Medium Codes](#)

Color Index Generic Name	CI Common or Historical Name	Common, Historic and Marketing Names	C.I. Constitution Number	Chemical Composition	Color Description † = Long Term Effects of Light	Opacity 1 = opaque 4 = trans.	Light Fastness I = excel. IV=Fugitive	Oil Absorption g/100g	 Toxicity & Hazard Info	Side Notes
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Color Index Generic Name: [Key Top ^](#) [Page Top ^](#)

This is the C.I. Generic Name (abbreviated) given by the ASTM and Colour Index International (CII) for that pigment. The first 2 or 3 letters describe the general pigment color and the number is the individual pigment identifier. N/A (not applicable) means that pigment has not been given a color index name or number.

Natural Dye and Solvent Pigments

These are naturally occurring organic pigments and dyes. With a few exceptions, most are plant or animal extracts or dyes that need to be fixed to a substrate to become pigments (i.e. Madder Lake). A few are organic natural earths such as Cassel earth (Van Dyke Brown). They are designated with C.I. Generic name of which consists of the usage class "Natural" and basic hue, followed by the CI serial number (i.e. Natural Brown 8). Natural pigment CI generic names are often abbreviated with the usage class N + the hue abbreviation + the serial number. (i.e. NBr 8)

NY = Natural Yellow;
NO = Natural Orange;
NR = Natural Red;
NV = Natural Violet;
NB = Natural Blue;
NG = Natural Green;
NBr = Natural Brown;
NBk = Natural Black;
NW = Natural White;

Pigment

Pigments can be organic or Inorganic. Most modern pigments are given this usage designation by the Color Index. They can be completely synthetic, naturally occurring minerals, or lakes based on the synthetic derivatives of natural dyes. Pigments are designated with C.I. Generic name which consists of the usage class "Pigment" and the basic hue followed by the CI serial number (i.e. Pigment Red 106, Cadmium Red). The pigment CI generic names are often abbreviated with the usage class P + the hue abbreviation + the serial number. (i.e. PR83 for Pigment Red 83)

PY = Pigment Yellow;
PO = Pigment Orange;
PR = Pigment Red;
PV = Pigment Violet;
PB = Pigment Blue;
PG = Pigment Green;
PBr = Pigment Brown;
PBk = Pigment Black;
PW = Pigment White;
PM = Pigment Metal

The CI (Color Index) Common Pigment Name: [Key Top ^](#) [Page Top ^](#)

In this database the common name is the name given in the Color Index (third edition, 1997) by the [Color Index International](#) published by the [Society of Dyers and Colourists](#) and the [American Association of Textile Chemists and Colorists](#), and are also used by the [ASTM International](#), American Society for Testing and Materials.

When the Colour Index (3rd edition) has not specified a name, I have used the name that the first manufacturer, inventor or original patent holder has given that pigment. In the case of ancient pigments, historic pigments, minerals or other odd pigments, I have used the most commonly used traditional historic, mineral or chemical name as determined by my research.

Common, Historic and Marketing Names: [Key Top ^](#) [Page Top ^](#)

These are the various names that have been used for that pigment **whether or not it is the correct usage**. This is NOT an endorsement of any particular name, but merely a collection of names that are in common usage *or have been used in the past* according to historic pigment books & references, paint sales literature, and pigment manufacturers references. They have been collected (in order of importance) from

- 1.) Paint manufacturers, pigment manufacturers and/or other pigment supplier literature;
- 2.) Various web sites in particular [AMIEN.org](#), [Dick Blick Artist Supply](#), [Handprint.com](#), [Kremer Pigments](#), [Natural Pigments](#), [Kama Pigments](#), [Sinopia Pigments](#), [PCImag.com](#) and along with internet forums on art and painting, web sites of paint manufacturers, paint suppliers, chemical manufactures and pigment manufacturers;.
- 3.) The Color Index, Third edition (published by the Colour Index International, 1997);
- 4.) Historical books on pigments, oil painting, watercolor painting and other art forms ([see Free Art e-Books](#));
- 5.) Artist manuals and handbooks (see the bottom of the [Pigment Database's main page for a complete list of reference works](#));
- 6.) Various dictionaries and encyclopedias (both historic and contemporary).

(hue):

When a manufacturer has used a common historical name for a pigment that is *not* the accepted traditional historic pigment name and has not clearly indicated it to be a hue or substitute, I have indicated it with the "(hue)"* in parenthesis. For example calling naming a paint made with Phthalocyanine Blue as "Azure", "Smalt" or "Cobalt Blue".

*In order to stay within ASTM specification D 4302-05, manufactures are encouraged to use the word "hue" when the paint or

pigment marketing name is not the real name of a paint or a pigment. Substitute and tone could be also considered acceptable means of indicating a hue substitute for the actual color. However, the ASTM specifications are usually voluntary and there is little means to enforce them. Also because of language differences, changes in the paint or pigments common identification because of contemporary usage (often perpetrated by manufacturer's incorrect color marketing names), and last but not least - the sheer multitude of historically used paint names for any given paint/pigment, it's nearly impossible to prove or say a manufacturer of art materials is being purposely deceptive.

C.I. Constitution Number or Colour Index Constitution Number (chemical composition): [Key Top ^](#)

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These are the chemical constitution numbers given that pigment by the [Color Index International](#) published by the [Society of Dyers and Colourists](#) and the [American Association of Textile Chemists and Colorists](#), and are also used by the [ASTM International](#), American Society for Testing and Materials. Each of the numbers in the "Colour Index Constitution Number" has a specific chemical or compositional meaning; for more information [see the Colour Index Number Chart](#) or go to the [Color Index International](#) and [ASTM American Society for Testing and Materials](#) web sites (these links open in a new window)..

Chemical Composition: [Key Top ^](#) [Page Top ^](#)

These are the basic chemical names, or mineral names along with chemical composition. I have also included CAS numbers, when I can find them. Sometimes multiple names are given because chemical names can be stated in different ways and can also give an indication of the manufacture method. Very often a pigment can be a group of related compounds rather than one specific chemical. I have not included detailed chemical descriptions or analyses, but only basic information that should help you to find further information. I have included references designated with "(Ref)" where further information can be attained.

Adulterants, extenders and other additives may be added to artistic paints to improve the paint rheology, transparency, and/or drying time. Often inert pigments, extenders and fillers are added to the color pigments in student grade paints or to modify paint pigments with overly strong tinting strength, i.e. the Phthalocyanine Blues and Greens. These extra ingredients are rarely listed of the label.

Color Description: [Key Top ^](#) [Page Top ^](#)

This is a general attempt to explain the hue in plain English. The perception of color is as individual as the the people viewing it and any such description can not be completely accurate, but merely give a general idea of the what color looks like to the average person. Many pigments have a range of shades and hues. This range in hues can be due to many things such as different manufacturing processes, exact chemical composition and crystal shape. In most cases, i have not used any of the attempted means of standardizing color descriptions for this (such as the [Munsell system](#)), but where the pigment is included in the [Color Index International Pigments and Solvent Dyes](#) (The Society of Dyers and Colourists, third edition 1997), I have used that description, when there is no color hue description in the Color Index, I have used other reference sources in particularly manufacturer or supplier literature.

† = Effects of long term light exposure are given when known, this may allow an artist to anticipate color changes and possibly use them as an advantage. These effects are all relative to the pigments inherent light fastness and *may take decades or even centuries in museum conditions to be visible*.

Fades = Becomes more Transparent

Lightens = Loses chroma but maintains relative transparency or opaque character;

Whitens = Becomes lighter towards white and more opaque;

Darkens = Becomes darker but retains hue;

Dulls = Loses chroma towards neutral but maintains the relative tone;

Blackens = Turns very dark or black losing chroma;

Hue shift = Changes hue towards a different color

Opacity - Transparency: [Key Top ^](#) [Page Top ^](#)

This designation is only a general reference to the most common encountered opacity or transparency inherit to the pigment. In paints, the transparency of a pigment can change due to what is used as the painting medium or binder (i.e., oil color, watercolor, encaustic, acrylic, etc.). There are many pigments that are opaque in watercolor but transparent or semi-transparent in oil paints. The transparency of a paint or pigment can often be manipulated by the manufacturing process for a particular purpose. The addition of inert pigments or other modifiers can also change the perceived transparency of a paint formulation or pigment.

When available, i have used the Color index's designation or manufacturers literature to arrive at this figure. When the Color Index description is unavailable i have arrived at a general figure by manufacturer literature or personal experience. A general designation such as given will not always be the case in any particular formulation.

1 = Opaque,

2 = Semi-Opaque,

3 = Semi-Transparent,

4 = Transparent

Light Fastness Rating: [Key Top ^](#) [Page Top ^](#)

The light fastness rating can only be a general guide, when available, i have used the ASTM rating or manufacturers literature to arrive at this figure. The ASTM has not rated all pigments, and I believe will no longer be rating pigments. For that reason the rating in this database will not always be the ASTM rating but a rating culled from other sources, most importantly manufactures literature. The ASTM ratings have a 5 increment scale and the blue-wool scale is 8, in this database lightfastness ratings have been condensed or averaged to a less specific 4 designations. Very often, pigments in tints are less light fast and this should be taken into account when

determining if a pigment or paint will meet your needs. I can not cover every possible paint, binder, or pigment formulation in this chart as it would take too much time and space. In particular the quality of the actual pigment manufacture has much influence on a pigments fastness to light, heat and other chemicals. Additives, binder, and many other factors all have a influence on light fastness or fastness to other environmental influences. Whether a paint is watercolor, oil color, tempera, etc. has an effect on light fastness. Varnishes and other treatments to the painting surface or support can have an influence too. The only way to be sure, is to make your own tests on the paint or pigment you have. Reference the following: ([ASTM D4303 - 10, Standard Test Methods for Lightfastness of Colorants Used in Artists' Materials](#), or [ASTM D01.57, the Subcommittee on Artists' Materials doc here](#), opens new window); or this ([AMIEN.org Thread](#) - opens new window). Blue Wool Scale will be given when known, but be aware that these may be from tests on a single formulation, and may not be the same for all brands or binders.

I = Excellent,
II = Good,
III = Poor (may last many years in museum conditions, but should be used with caution for permanent works of art)
IV = Fugitive/Very Poor

BWS = Blue wool scale

7-8 = Excellent,
6 = Very Good,
4-5 = Fair (Impermanent),
2-3 Poor (fugitive),
1 = Very Poor (fugitive)*

*When known, blue wool scale ratings will be given for tints in the following format: Full;1/2 tint;1/4 tint (i.e. Cadmium Red would be 8;8;8 with excellent light fastness in all tints). Note: these may from tests on a single formulation or pigment brand, and may not be valid for other brands or binders.

Oil Absorption: is given in g/100g or grams of oil per 100 grams of pigment [Key Top ^](#) [Page Top ^](#)
or as H, M, L (see below)

The oil absorption figure has been arrived at from the pigment manufacturer's literature or artist reference sources (see the bottom of the [Pigment Database's main page for a complete list of reference works](#)). The higher the oil absorption, generally, the longer it will take to dry when used in oil painting. The addition of driers, siccatives, retardants and other additives can effect the drying time of any specific formulation, or they can be added by the artist to speed up or slow down the drying of oil paints. In some literature the oil absorption rate is given as ml/100g, although not technically the same as g/100g, for the purposes of this database they are close enough.

Depending on the specifications i have available I may also use the following designations:

H = High; - These pigments absorb a lot of oil.
M = Medium; - Average drying or cure rate
L = Low; - Usually very fast driers

Toxicity: [Key Top ^](#) [Page Top ^](#)

Under this heading will be a general designation of a possible hazard. It is assumed intelligent people will use at least ordinary care when handling all paints or pigments. The designation has been arrived at from, in most cases, the manufacturer's literature, art books and art reference works (see the bottom of the [Pigment Database's main page for a complete list of reference works](#)), MSDS sheets, the EPA manual: [Environmental Health & Safety in the Arts: A Guide for K-12 Schools, Colleges and Artisans \(full PDF here\)](#), [The Art & Creative Materials Institute, Inc. \(ACMI\)](#), The [Health and the Arts Program](#) - Great Lakes Centers at the University of Illinois at Chicago School of Public Health (UIC SPH), [The American Institute for Conservation of Historic & Artistic Works](#) has a collection of articles on art safety, The Consumer Product Safety Commission's [Art and Craft Safety Guide \(PDF, 250 KB\)](#) and [Art Materials Business Guidance](#)

All paints and especially dry pigments can be hazardous if carelessly handled, but, if handled properly with common sense all but the most dangerous pigments can be used safely. Very few pigments used in the arts are edible, and even so called "Food Colors" are not meant to be used in large quantities and may have unknown side effects or allergic reactions.

WARNING: Always use a dust mask when working with any dry pigments. Work in a separate area of your studio away from children, pets or other living things. Do not smoke, eat or drink around any art materials. Dispose of all waste materials in an environmentally safe way.

A = Low hazard, but do not handle carelessly;
B = Possible hazard if carelessly handled, ingested in large amounts or over long periods of time;
C = Hazardous, use appropriate precautions for handling toxic substances;
D = Extremely Toxic, only attempt working with these pigments (especially the dry form) in laboratory like conditions with proper safety equipment (see "[Prudent practices in the laboratory: handling and disposal of chemicals](#)" at [google books](#) opens new window); or the [PDF - Booklet Safe Handling of Colour Pigments](#) Copyright © 1995: BCMA, EPSOM, ETAD, VdMI - [link from VdMI](#)

The Side Notes Column: [Key Top ^](#) [Page Top ^](#)

These are typically interesting things I have read, or information collected on a pigment that may be worth further study. Please remember that they are *NOT* statements of absolute fact. Many pigment qualities are rumors, old wife's tales and misconceptions repeated over and over until they accepted as fact without any scientific proof. References (Ref) may be provided for further info.

Miscellaneous:

(hue) = When the word "hue" in in parenthesis (hue), it refers to a hue color not designated on the label, when the word "hue" is *not* in parenthesis *is* part of the pigment name as per ASTM guidelines.

(Ref) = A link to a reference source. This may be the reference source of the information that I have given, or just a link to more detailed information.

? = a question mark next to a name, note, or data code indicates that it may or may not be correct information due to conflicting information, questionable references, possible typo or other discrepancies in the manufacturer or other reference documentation. Further study is needed to clarify.

Paint or Pigment Manufacturer Code & Art Medium:***** [Key Top ^](#) [Page Top^](#)

Paint/Pigment Manufacturer Code:

The manufacturer code is to indicate companies that make or supply paints or pigments using the particular pigment. Only those products that are single pigments will be indicated in this database. In a few cases, the Color Index International has listed a mixture of pigments or chemicals under a single color index pigment name or code, and these will also be designated as if they were a single pigment. The codes next to the pigments in above Color of Art Database may take you off sight where you can find more info or even purchase, if you so desire. These codes are not part of any standard, but were made up by me for this database, with purpose of making them as short as possible.

The links below next to the manufacturer code below are to the official manufacturer web site and will open in a new window.

AS = Art Spectrum	DG = Daniel Green	LB = Lefranc & Bourgeois	MW = Martin/F. Weber Co.	SE = Sennelier
BR = Blueridge	EP = Earth Pigments	LA = Lascaux	NP = Natural Pigments	SI = Sinopia
BX = Blockx	GB = Gamblin	LQ = Liquitex	OH = Old Holland	SCH = Schmincke
CAS = C.A.S AlkydPro	GEN = Common Generic term	LK = Lukas	PF = Pebeo Fragonard	SCHM = Schmincke Mussini
CH = Charvin	GO = Golden	MA = Maimeri	RF = R&F Handmade Paint	SQ = Steven Quiller
CL = Classic Triangle Coatings	GR = Grumbacher	MT = Matisse	RGH = RGH Artists' Oil Paints	TA = Tri-Art
CR = Chroma	GU = Guerra Paint & Pigment	MG = M. Graham	ROSS = Bob Ross	UT = Utrecht
DS = Daniel Smith	HO = Holbien	MH = Michael Harding	RT = Royal Talens	VI = Vasari
DR = Daler-Rowney	JO = Jo Sonja	MR = MIR. Jaurena Art.	SH = Shinhan	WL = Williamsburg
DV = Da Vinci	KA = Kama Pigments	KP = Kremer Pigmente (USA site)	SV = Shiva	WN = Windsor & Newton
DB = Dick-Blick				YK = Yarka / St.Petersburg

Paint medium or binder code: [Key Top ^](#) [Page Top^](#)

Clicking on the paint or pigment manufacturer code next to the pigment name will take you off site where more information can be found. The link will most often take you to an art supplier where you can find more specific art medium or paint binder info, purchasing source, pigment properties, pigment history, MSDS sheets, and whether it is the artist premium or student economy grade. *If you find this site helpful you can help support this site by purchasing through these links.*

d in *italics* next to the pigment manufacturer or art supplier code indicates a discontinued pigment or paint.

All other art medium or binder codes in *italics* mean the pigment under that name is in the "student" or economy grade, not the "artist's" grade paint.

a = Acrylic Paint, heavy body;

ab = Acrylic Airbrush colors;

ad = Aqueous pigment dispersions;

af = Fluid Acrylics;

ag = Matte Acrylic or Acrylic Gouache;

ao = open acrylics or slow drying

k = Alkyd paints;

c = Casein or milk paint;

d = Discontinued

e = Encaustic paints;

g = Traditional water color Gouache;

i = Ink (printing ink or pigmented drawing inks);

o = Oil Paint;

p = Dry Pigment;

t = Artist Professional Tempera or Egg Tempera;

w = Watercolor Paint in tubes;

wp = Watercolor Pan; wp = 1/2 pan, wp(f) = full pan, wp(L) = large pan
wo = Water mixable oil paint or water soluble oil paint.

am = Acrylic medium, may have a wide variety of ingredients or uses

om = Oil painting Medium, may have a wide variety of ingredients or uses

wm = Watercolor Medium, may have a wide variety of ingredients or uses

GEN = Where there is a generally accepted common historic name associated with a pigment, I have used "GEN" to denote the generic or common historical name of a particular pigment.

Other than gouache, only single pigment paints and pigments are included. Gouache is designated distinct from watercolors because it is often mixed with white or additives to make it matte and/or opaque and that is not usually indicated on the paint manufacturers literature. Other art material or medium forms such as pastel, oil pastels, oil bars, dyes and ceramic glazes will not be designated with a artists medium or binder code, but may still be listed under the pigment name with a company code.



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Artist Reference Resources:

Historical Artist and Pigment Reference Sources:

This is just a partial list, for a more complete listing of Historical Pigment References see the [Free Art Books Page](#).

1. [The Industrial and Artistic Technology of Paint and Varnish](#),
By Alvah Horton Sabin, Published by J. Wiley & Sons, 1904
2. [The Painters' Encyclopaedia](#),
By Franklin B. Gardner, Published by M.T. Richardson, 1887
3. [The Science of Painting](#),
By Jehan Georges Vibert, Published by P. Young, 1892
4. [A Treatise on Painting](#),
By Cennino Cennini, Giuseppe Tambroni, Mary Philadelphia Merrifield, Translated by Mary Philadelphia Merrifield, Published by Lumley, 1844
5. [A Treatise on Painting](#),
By Leonardo Da Vinci, John Francis Rigaud, Published by J.B. Nichols and Son 1835
6. [The Book of the Art of Cennino Cennini](#),
By Cennino Cennini, Cennini, Christiana Jane Powell Herringham, Translated by Christiana Jane Powell Herringham, Published by G. Allen & Unwin, Ltd., 1899
7. [The Chemistry of Paints and Painting](#),
By Arthur Herbert Church, Published by Seeley, 1901
8. [A Handbook for Painters and Art Students on the Character and Use of Colours](#),
By William J. Muckley, Published by Baillière, Tindall, and Cox, 1880
9. [The Household Cyclopaedia](#),
By Henry Hartshorne 1881
10. [The Chemistry of Pigments](#),
By Ernest John Parry, John Henry Coste, Published by Scott, Greenwood, 1902
11. [Facts about Processes, Pigments and Vehicles: A Manual for Art Student](#),
By Arthur Pillans Laurie, Published by Macmillan, 1895
12. [The Manufacture Of Earth Colours](#):
By DR. JOSEF BERSCH, translated by CHARLES SALTER, SCOTT, GREENWOOD & SON , 1921 [Link](#)
13. [Materials for Permanent Painting](#),
By Maximilian Toch 1911

Modern Pigment and Artist Reference Sources:

14. [The Artist's Handbook](#),
by Pip Seymour, Arcturus Publishing (September 16, 2003)
15. [The Artist's Handbook, Revised Edition](#),
Ray Smith; DK Publishing 2003
16. [The Artist's Handbook of Materials and Techniques](#),
Third edition, by Ralph Mayer; Viking Press 1979
17. [Artists' Pigments: Volume 1: A Handbook of their History and Characteristics](#)
Edited by Robert L. Feller
18. [Artists' Pigments: Volume 2: A Handbook of their History and Characteristics](#)
Edited by Ashok Roy (Oct 2, 1993)
19. [Artists' Pigments: Volume 3: A Handbook of their History and Characteristics](#)
Edited by Elisabeth West Fitzhugh (Oct 1997)

20. [Artists' Pigments: Volume 4: A Handbook of their History and Characteristics](#)
Edited by Barbara Berrie (Jun 7, 2007)
21. [Collins Artist's Colour Manual](#),
Simon Jennings; HarperCollins Publishers 2003
22. [Color Index International Pigments and Solvent Dyes](#),
The Society of Dyers and colourists, third edition 1998
23. [A Dictionary of Art Terms and Techniques](#),
Ralph Mayer, Harper and Row Publishers, New York, 1969
24. [The Materials and Techniques of Painting](#),
by Jonathan Stephenson (May 1993)
25. [The Painter's Handbook](#),
Mark David Gottsegen; Watson-Guption Publications 1993
26. [Painting Materials A Short Encyclopaedia](#),
by Rutherford J. Gettens and George L. Stout; Dover Publications 1966
27. [Pigment Compendium](#),
by Nicholas Eastaugh, Valentine Walsh, Tracey Chaplin, Ruth Siddall; Butterworth Heinemann 2004

Web Resources and Art Suppliers with Excellent Reference Materials:

28. [American Institute for Conservation of Historic and Artistic Works \(AIC\)](#):
National membership organization in the United States dedicated to the preservation of cultural material, establishes and upholds professional standards, promoting research and publications, educational opportunities, and fostering the exchange of knowledge among conservators, allied professionals, and the public.
29. [AMIEN](#):
a resource for artists dedicated to providing the most comprehensive, up-to-date, accurate, and unbiased factual information about artists' materials
30. [Blick Art Materials](#):
has done an extremely thorough job of indicating the pigments used in most of the paints they sell, making the Dick Blick art supply website much more than just a store to purchase paint and art supplies.
[Dick Blick also has the MSDS sheets](#)
for most of the products they sell, making the Blick site a valuable resource for toxicity info and the health and safety of artist materials.
31. [Coloria.net](#),
a large and thorough site on pigments, in Finnish <http://www.coloria.net/index.htm>
32. [Conservation and Art Materials Encyclopedia Online \(CAMEO\)](#), [The Materials Database](#),
developed at the Museum of Fine Arts, Boston (MFA), to be a more comprehensive and well-rounded encyclopedic resource for the art conservation and historic preservation fields. The MATERIALS database contains chemical, physical, visual, and analytical information on over 10,000 historic and contemporary materials used in the production and conservation of artistic, architectural, archaeological, and anthropological materials.
33. [Conservation OnLine \(CoOL\)](#):
A freely accessible platform to generate and disseminate vital resources for those working to preserve cultural heritage worldwide.
34. [The Handprint.com](#):
site by Bruce MacEvoy has loads of excellent information on [watercolor pigments](#) and [Has a excellent color wheel](#) showing where the actual pigments are in color space. Truly an awesome site, the site is directed at watercolors, but is a good general reference for any paints or pigments.
35. [Webexhibits.org](#):
Great pigment sight that even includes step by step instructions for making you own pigments.
36. [The Real Color Wheel](#):
by Don Jusko is also a great color site.
37. [Studiomara](#):
has a fantastic [pigment reference database](#) sorted by the marketing paint color name and brand.
38. [Health and Safety in the Arts](#):
A Searchable Database of Health & Safety Information for Artists
39. [Household Products Database](#):
Health and safety information on household products from the US Department of Health and Human Services
40. [Natural Pigments](#):
One of the best sources of rare natural and historical pigments and information.
41. [Pigments and their Chemical and Artistic Properties](#): by Julie C. Sparks, is part of [The Painted Word Site](#). Wonderful stuff.
42. [Paintmaking.com](#): By Tony Johansen, Great Paint making site with all types of useful pigment and binder information for the artist.
43. [PCLmag.com](#): Paint & Coatings Industry
[2010 Additives Handbook](#) by Darlene Brezinski, Dr. Joseph V. Koleske, Robert Springate, June 4, 2010;
[A History of Pigment Use in Western Art Part 1](#);
[A History of Pigment Use in Western Art Part 2](#)
44. [Dick Blick Artist Supply](#):
Full Range of art supplies at discount prices and has pigment info on most paints they sell
45. [Kremer Pigmente Europe / Kremer Pigments USA site](#):
Has a huge amount of pigments and information.
46. [Earth Pigments](#):
Specializes in earth pigments.
47. [Guerra Paint and Pigments](#):
Many rare and out of production Pigments mostly in aqueous dispersions
48. [Sinopia](#):
Lots of Pigments & info

Health and Safety in the Arts References and Info:

49. [Art and Craft Safety Guide \(PDF, 250 KB\)](#)
Consumer Product Safety Commission
50. [Art Materials Business Guidance](#)
Consumer Product Safety Commission
51. [Art Safety](#)
Environmental Protection, Health & Safety, California State University at Monterey Bay
52. [Artist Safety](#)
Center for Research on Occupational and Environmental Toxicology, Oregon Health & Science University
53. [Environmental Health & Safety in the Arts: A Guide for K-12 Schools, Colleges and Artisans](#)
U. S. Environment Protection Agency
54. [Exposing Ourselves to Art \(PDF, 6.83 MB\)](#)
Scott Fields. Environmental Health Perspectives Volume 105, Number 3, March 1997
55. [Health & Safety Bibliographic Resources and Resource Guides in Art Conservation](#)
CoOL – Conservation Online, Stanford University Libraries
56. [Health and Safety Guides and Publications](#)
American Institute for Conservation of Historic and Artistic Work
57. [Art Safety](#)
Office of Environmental Health and Safety, Connecticut College
58. [Health and the Arts Program](#)
The Occupational Health Service Institute, University of Illinois at Chicago
59. [Online Health and Safety in the Arts Library](#)
The Occupational Health Service Institute, University of Illinois at Chicago
60. [Arts, Entertainment and Recreation](#)
New York Committee for Occupational Safety and Health
61. [Studio Safety](#)
Gamblin Artists Colors

*other ASTM specifications used the the labeling of artists materials are:

[D4236-94\(2011\) Standard Practice for Labeling Art Materials for Chronic Health Hazards](#)

[D4302-05\(2010\) Standard Specification for Artists' Oil, Resin-Oil, and Alkyd Paints](#)

[D4303-10 Standard Test Methods for Lightfastness of Colorants Used in Artists' Materials](#)

[D4838-88\(2010\) Standard Test Method for Determining the Relative Tinting Strength of Chromatic Paints](#)

[D4941-06\(2010\) Standard Practice for Preparing Drawdowns of Artists' Paste Paints](#)

[D5067-05\(2010\) Standard Specification for Artists' Watercolor Paints](#)

[D5098-05a\(2010\) Standard Specification for Artists' Acrylic Dispersion Paints](#)

[D5383-02\(2010\) Standard Practice for Visual Determination of the Lightfastness of Art Materials by Art Technologists](#)

[D5398-97\(2010\) Standard Practice for Visual Evaluation of the Lightfastness of Art Materials by the User](#)

[D5517-07 Standard Test Method for Determining Extractability of Metals from Art Materials](#)

See also [WK41263](#) proposed revision

[D5724-06\(2010\) Standard Specification for Gouache Paints](#)

[D6801-07 Standard Test Method for Measuring Maximum Spontaneous Heating Temperature of Art and Other Materials](#)

[D6901-06 Standard Specification for Artists' Colored Pencils](#)

See also [WK27266](#) proposed revision

[D7354-11 Standard Guide for Artists' Paint Waste Disposal in Private, Non-Commercial Settings](#)

[D7355-10 Standard Guide for Artists' Paint Waste Disposal in Smaller Commercial or Educational Settings](#)

[D7733-12 Standard Specification for Acrylic Dispersion Ground](#)

WK28388 New Specification for Traditional Artists Watercolor Paints

WK37409 New Test Method for Measuring Aspiration Potential of Aerosol Products

WK37916 New Specification for Standard Specification for Artists Pastels

I hope you you have found the Pigment Database useful info for oil painting and watercolor painting, acrylic painting or indeed any painting medium; I have tried to make this a good resource for the fine arts, that has the important information on toxicity of paint and art materials including the hazards of some craft materials used by decorators, interior designers, illustration and graphic designer;

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This page of the Color of Art Pigment Database was designed for C.I. Pigment Brown.

CI Pigment White is indicated with the pigment code "Pigment White" followed by the color index international's pigment identification code number or pigment ID number. The full color index name or generic pigment name is usually shortened to the Color Index code which for pigment White is "PW" plus the color index # (after the "PW" pigment White code designation there is the Color index identifying number code for the specific pigment, i.e. "PW 6" or "PW 1"). All artist paints and pigments that are [ASTM International](#) (American Society for Testing and Materials) and [ASTM D4236 - 94*](#) compliant that are sold in the United States must have the pigment identification number or generic chemical names of the White pigments that were used to make the natural earth paints or dry pigments (either powdered White pigments or in the commonly found "pigment dispersions") and should have the generic pigment name printed on the paint label. The "White oil paint" tube or "White oil color" paint label, along with the label on tubes of acrylic paints, and on the label on tubes of watercolor even when found as pans, half-pans or dry cakes and often sold as a complete color palette or "watercolor set", will have the pigment or pigments index name on the label, or printed directly on the paint tube.

This color database is also a great pigment reference made for DIY artist's and artisans that make their own paints with raw pigments and grind or mull the pigments into homemade paints giving them complete control over the paints grind, texture, and color. Making your own paints (paint making) by mulling the pigment in with a binding medium can be a rewarding and fun creative experience. The artist is involved in the process of creation, from the beginning with only the raw dry pigments and proceeding on to grinding pigments with a binding media (usually shortened to "binder"). For making oil paints, linseed oil is the most common binder (or medium). Walnut oil is also common oil used in making oil colors in the art studio and is less yellowing than linseed oil, There are other less common drying oils and some new alkyd resins that are sometimes used in making oil colors in the studio. Making (or grinding) watercolor paint is also fun and easy. The most common formula for making homemade watercolors is mostly water with some dissolved gum arabic (the glue that holds the paint together when dry). Honey and glycerin are common additives used in varying proportions to adjust the drying time and re-wetability of the dried watercolor. See the Art is Creation [Recipe page](#) for more info and paint making or grinding medium recipes. Egg-oil tempera and other media can be made in the art studio by DIY artists and it is creative and fun to make your very own paints. It is a very rewarded creative experience to grinding (mulling) your own paints and then finally making a painting or work of art, all entirely created by the artist themselves from start to finish.

The Art is Creation, Color of Art Pigment Database Reference has the resources and info on pigments used for artist paint, student paints, Oil color including:

- Oil Paints
- Watercolors
- Acrylic Paint
- Pigments used in making paint
- Dry Pigments and Powders
- Aqueous Pigment Dispersions
- Fluid Acrylics
- Airbrush Paint
- Acrylic Gouache
- Matte Acrylic Paints
- Acrylic Vinyl
- Acyclic paint or Alkyd Oils
- Casein or Milk Paint
- Encaustic painting
- Gouache
- Printing Inks or Pigmented Drawing inks
- Oil sticks or Oil Bars
- Oil Base Pigment Stick
- Tempera or Egg Tempera
- Watercolor Sticks
- Watercolor Pigment Sticks or Bars
- Water mixable oil paint or water soluble oil paint