

THE GUIDE TO UTRECHT PROFESSIONAL ARTISTS' MATERIALS

From the beginning Utrecht Art Supplies led the industry in promoting studio craft through tutorials, materials data and articles that made the company a valued resource for artists and educators.

Included with every order from the Utrecht Linens catalog, the "Utrecht Guide" was a familiar fixture in classrooms and studios across the country. While some product formulas may have changed slightly over the years (please refer to utrechtart.com for current data), overall the Guide is as relevant today as in the 1960s.

We hope this digital reprint proves as popular and useful to contemporary artists as the original was in the last century!

> Matthew Kinsey Utrecht Art Supplies "Ask the Experts" Team

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THE GUIDE TO UTRECHT PROFESSIONAL ARTISTS' MATERIALS

SINCE 1949. UTRECHT HAS PLAYED A SIGNIFICANT ROLE IN THE REVIVAL OF ARTISTS PREPARING THEIR OWN CANVAS

Foday it is a completely accepted practice for rtists to prepare their own canvas. Since 1949, Jtrecht has been a significant force in bringing his about throughout the whole contemporary art world.

t seems hard to believe today, but for many rears before 1949, only a small percentage of irtists prepared their own canvas. There were wo major reasons for this. (a) The simple procedure for preparing canvas was not generally familiar. (b) Also, there was not a complete line of unprimed canvas easily available for the professional artist.

in 1949 Utrecht began a program publishing nstruction booklets and articles on the simple procedure of preparing canvas in the Utrecht tatalog which millions of copies were listributed over the years throughout the USA.

n 1949 Utrecht also began developing a range of unique textures and weights of properly voven unprimed canvases. The Utrecht uperior professional line of unprimed canvas provided many artists with a strong incentive to begin preparing his own canvas.

For about 500 years before 1957 the two step brocedure of glue sizing and applying oil priming white on the canvas for oil painting was he only generally accepted method and naterials to be used. In the early 1950's Utrecht believed that a single step canvas preparation could be developed. In 1957, after years of careful research and testing, Utrecht nanufactured and introduced professional Jtrecht Acrylic Gesso and Utrecht Acrylic Colora

The introduction of Utrecht Acrylic Gesso contributed to the great innovation in canvas preparation. Utrecht is one of the first major nanufacturers of Professional Acrylic Gesso and Acrylic Colors in the world. It provided artists vith a very simple single step method of reparing their own canvas, for acrylic or oil vainting. This contributed significantly to the receleration of the practice of Artists verywhere preparing their own canvas. Utrecht verylic Gesso has become one of the most videly used priming today.

UTRECHT ARTISTS CANVAS

The general function of the linen and cotton anvas support is to provide a foundation upon which painting is permanently adhered to.

inen and Cotton canvas are the two basic upports which artists generally use for oil and crylic painting today. Each has its own special roperties and characteristics. The proper hoice of the canvas support and texture epends on the artists painting requirements. **EXTURE AND WEIGHT OF CANVAS**

he texture of the canvas provides a mechanical rip for the paint layers to adhere to it. herefore, the rougher the texture and heavier he weight of the canvas provides greater dhesion for heavier applied paint layers.(Refer o the Utrecht Catalog for the wide selection of rofessional.unprimed and primed canvas.

CROSSBRACING THE UTRECHT

EXTRA HEAVY DUTY STRETCHERS

he cross bracing of larger works reduces the ossibility of the 'twisting' of Utrecht rofessional extra-heavy 1 1/4"x 2 1/4" tretchers. This twisting can be produced by the ension created by the stretching procedure. ension can also be produced by the greater hrinkage of the linen than cotton canvas during he drying of the glue sizing. However, the tretching of primed canvas results in less ensions and twisting of the stretchers.

cross Bracing Utrecht's Extra-Heavy Duty tretchers: Utrecht Professional Extra Heavy Prossbraces are 3/4"x2 1/4" and have four ounded edges to minimize producing an mpression on the canvas. They come in four asic sizes: 36", 46", 56" and 68" which can be asily cut to the required length.

canvas that may need crossbracing is when he longer side exceeds approximately 44" egardless of the length of the shorter side. When the length of the long side exceeds 60" ou may use two or three crossbraces across the horter distance.



than pre-primed linen or canvas. It is important to handle and stretch already prepared canvas carefully to avoid producing crea

You can use either a Staple Gun using 5/16' staples or a Hammer using 1/2" carpet tacks. A magnetic tack hammer can speed the process of nailing and stretching your canvas.

It will be helpful if before beginning the stretching procedure, mark the center of each side of the stretcher and canvas with charcoal This will help you to line up the canvas with the middle of the stretchers.

It is recommended to have the front of the canvas facing away from you and with the back of the canvas facing you. This will enable you to stretch the canvas more tightly toward you.

> Attaching Side One: Center A---C the canvas on the stretchers so that it will overlap at least three inches on all the sides equally.



shorter side (corresponding with position A on the diagram). Next pull the canvas tightly toward the corner of the same short side and fasten the canvas with a tack or staple about three inches from the end

of the stretcher strip. (Position B) This is to allow room to fold the canvas in the corners and nail in, which is done after all four sides are attached. Repeat this on the opposite corner of the same side. (Position C) Now the first side of the canvas has now been fastened with only three tacks or staples.

Attaching Side Two: Turn the canvas completely around with the opposite untacked shorter side on top. Pull tightly from the center and away from the opposite shorter side fasten the tack or staple in the center of the strip at *Position D.* Then, tack or staple one corner (*Positions E*) pulling tightly in a direction away from the center of the stretcher and at the same time away from the opposite side. The tack or time away from the opposite side. The tack or staple in *Position E* should be about 3 inches away from the end of the stretchers. Now repeat the procedure for fastening the opposite corner 3" away from the end (Position F

Finishing Attaching Sides One and Two: The canvas is now stretched tautly with only six tacks or staples. Begin stretching and nailing the tacks or staples no more than two inches apart, starting out from the center of the short sides stretching the canvas toward you.

Leave all the corners untacked until the final step of the stretching procedure.

Attaching Sides Three and Four: Repeat the bove stretching procedure used on sides one and two on the longer sides.

The Canvas Corners: After you have stretched all four sides the corners can be done. Fleating fold and tuck in the canvas under at the corners and place the tacks or staples in the wider part of the stretcher joint which is either at the top or bottom of the edge at alternate ends of the stretcher strips.

Note: Large size canvases: One can place two tacks or staples about an inch apart at each of the six positions A-F.

THE PREPARATION OF THE CANVAS

The basic requirements of the primed canvas; is to provide a foundation for the paint layers to permanently adhere to it.

Utrecht Acrylic Gessos and Utrecht Oil Priming White are the two major tested canvas priming materials Utrecht manufactures. We will materials Utrecht manufactures. describe the method of canvas preparation with these priming materials.

> UTRECHT ACRYLIC GESSOS' For Oil or Acrylic Painting

Utrecht Acrylic Gesso is used as a priming for both oil and acrylic painting. It has eliminated the need for the traditional glue sizing the canvas. Utrecht Acrylic Gessos' are a completely formulated painting ground ready to apply to the unprimed canvas. It will dry in a matter of hours and be ready to paint on.



Utrecht Acrylic Gessos' will retain their whiteness and flexibility indefinitely. The high adhesive strength Pure Polymer Emulsion produces a priming that becomes one with the canvas. It thins with water, dries waterresistant and is oil proof.

Utrecht Acrylic Gesso's and Acrylic Colors Adhere to a Wide Range of Surfaces. The acrylic emulsion of Utrecht Acrylic Gesso's have a high adhesive strength that can be applied and adhere to almost any clean surface that is not greasy or oily, such as linen, cotton, paper, cardboard, wood, masonite, plywood, masonry and stone. Before gessoing masonite the surface should be sanded.

Priming Must Dry Under Normal Conditions. Never use artificial heat to accelerate the drying of either Utrecht Acrylic Gesso, the glue sizing or Utrecht oil priming white. Let it dry under normai room temperature conditions.

THE UTRECHT GESSO PREPARATION

It is recommended to gesso unprimed canvas after it has been already mounted on the arretchers. Utrecht Acrylic Gesso can be applied with a wide 3" Utrecht Gesso brush. No preliminary sizing or sealing is technically necessary.

The significant ingredient of Utrecht Acrylic Gessos is the acrylic polymer emulsion. This contributes to the scaling of the canvas fibers, (replacing the need for the traditional rabbit skin glue sizing) protecting it from any harmful absorption of oil from the oil paint layers.

Artists find it is more efficient to prepare several canvases at one time.



First thin Utrecht Acrylic Gesso with up to 1/3 water for the first priming so that the Gesso can flow more easily into the fibers of the canvas. This is important in order to

FIRST PRIMING:

have the priming permanently anchor itself into the linen and cotton fibers.

Begin by moistening the brush with water. Work the brush back and forth in one direction and then in a cross direction with a little pressure so the Gesso can better penetrate the fibers of the canvas. Do one area at a time.

Gesso on the sides of the canvas where it has been tacked or stapled onto the stretchers. This will eliminate any unraveling of the edges of the unprimed canvas. Also to protect the canvas from any accidental contact with oil paint.

Smoothing The First Priming: After the first priming of Utrecht Acrylic Gesso has dried, the canvas may have a little roughness, created by the fuzz of the fabric. This can be easily eliminated by rubbing a very fine grain sandpaper very gently over the whole surface of the canvas. When sanding over the rim of the stretchers place your finger tips underneath and gently raise the canvas away from the rim. This is to avoid producing an impression of the stretcher rim on the surface of the canvas.

Second Gesso Priming: The second priming of Utrecht Acrylic Gesso does not need to be thinned with water. Apply it as the first. Do not sand the second priming in order to preserve it's protection of the canvas fibers.

TONE GROUNDS: Over the centuries artists have painted on either a white or a tone ground. A tone ground can be made by tinting Utrecht Acrylic Gesso with any Utrecht Acrylic Color or Gesso Color. One can also apply the tinted Gesso to the sides of the stretched canvas

unprimed canvas because of the high adhesive

warm water after priming.

For Oil Painting Only

The oil priming method involves two simple steps. (a) First to double size the canvas with a Utrecht rabbit skin glue solution, followed by an application of Utrecht White Oil Priming. The priming must be allowed to dry at least ten to fourteen days before it can be painted on

Some Artists who oil prime a large number of canvases at one time divide the work over a three day period. (a). On the first day apply the first sizing on all stretched unprimed canvas (b). On the second day sand the dried sizing and apply the second sizing. (c). On the third day begin the priming procedure.

Glue preserves both it's inherent high adhesive strength and flexibility.

Utrecht Rabbit Skin Glue comes in a fine granulated form that can easily be measured and dissolved without any preliminary soaking. Make only enough rabbit skin glue sizing for several hours use; after that, if needed, make a fresh batch. Glue sizing solution will gradually cool over a period of several hours and begin to jell. Never re-heat the jelled sizing solution to liquefy it . This will decrease it's adhesive properties.

Some artists use a double-boiler so when the glue sizing solution is made it is placed over the bottom pot which is filled with very hot water which has just been removed from the stove. This will safely delay the jelling action of the glue solution.

The granulated form Utrecht Rabbit Skin Glue can be stored indefinitely in a dry place.

PREPARATION OF SIZING SOLUTION:

Bring the quart of water to a boil, remove from the burner before adding the glue. Begin by adding the six level tablespoons little by little to the quart of hot water and keep stirring until it is completely dissolved. Never boil a glue sizing solution over a burner. It will decrease it's adhesive strength

An alternative method of preparing the glue size is to first gradually stir in the six level tablespoons of rabbit skin glue in a pint of hot water. After which add the second pint of hot water to make it a quart and stir the solution. This method has been found by some to be a quicker way to dissolve the glue compared to dissolving it directly into a quart of water.

A quart of sizing solution can cover approximately five square yards, depending on the texture. If one quart is not sufficient for the canvas to be sized, you can make more.

Rougher textures have more surface and, therefore, require a greater quantity of glue sizing solution. The second sizing will use a bit less sizing since the absorbency of the linen or cotton has been greatly reduced.



THE GLUE SIZING: Cover the entire canvas with the glue sizing with a 3 inch wide

missing any areas it is best to concentrate on one area at a time. The brush should be worked back and forth in one direction and then another. Apply with a little pressure so the sizing will penetrate and anchor itself into the fibers of the canvas.

Some artists also run their bare fingers (or wearing rubber gloves) over the wet size area to make sure no spots are missed. This will also help the sizing penetrate into the fibers of the canvas.

Glue Sizing the Sides: Glue size the sides of the canvas where it is nailed or stapled to the stretchers to prevent the edges of the fabric from unraveling. This will also protect the canvas from any direct contact with any oil paint during the process of priming and painting.

Smoothing the First Dry Sized Surface: After several hours, or the next day, the sized canvas may dry with a little roughness: produced by the fuzz of the canvas. This is easily remedied by very gently rubbing a very fine grain sandpaper over the whole surface. When sanding over the rim of the stretchers gently raise the canvas up from the back of the stretchers with your fingertips to avoid producing any impression of the stretcher rim on the surface of the canvas.

SECOND SIZING: The second sizing should be applied in a similar way as the first. The second sizing, however, should never be sanded. This is to prevent any possible removal of the any of protective sizing. The second sizing will be applied over a shorter period of time since it attaches itself to the first sizing without penetrating the fibers itself, which the first sizing has done already.

Do not store the sizing solution. Dispose of any remaining amount at the end of the sizing procedure and clean all utensils with hot water and brushes with warm water.

Always clean your hands thoroughly with



OIL PRIMING WHITE Utrecht Oil Priming White is composed of Titanium

Note: Acrylic colors can be applied directly to strength of the acrylic emulsion vehicle

Clean your hands thoroughly with soap and

UTRECHT OIL PRIMING

Priming The Sides: Apply Utrecht Acrylic



indicate with a pencil line precisely where to This is to make

ure the end of the crossbrace fits flush with the tretcher. Place the crossbrace strip of wood cut o the required length to fit snugly between the horter distance between the inside space of the tretchers. One can easily connect the cross race to the back of the stretcher strips with steel nending plates with screws (with or without the se of Elmers glue.)

Vhen placing a cross brace across two parallel ides one can still key out the other two sides to urther tighten the canvas, if needed.

THE STRETCHING OF THE CANVAS

here are several equally good ways to stretch rimed or unprimed canvas. We will suggest ne method which has been successfully used or many years. The unprimed linen and cotton anvases have a degree of natural elasticity which allows for easier handling and stretching

Utrecht Manufacturers Professional Acrylic Gesso and Artists Acrylic Gesso. They both are formulated and manufactured to fulfill the strict requirements of canvas preparation

Both Utrecht Acrylic Gessos are composed of pure titanium dioxide [PW6] with carbonate of calcium and ground in pure acrylic polymer emulsion. Titanium dioxide is the most brilliant white available. The particle size of carbonate of calcium is microscopically larger than titanium dioxide. This produces a priming surface with a slight tooth which many artists prefer for the way it responds to brush work.

Utrecht Professional Acrylic Gesso has a greater percentage of titanium dioxide in its formulation than Utrecht Artists Gesso.

Both Utrecht Acrylic Gessos' have great whiteness and covering power, which is indispensable for canvas priming; these standards guide their formulation and manufacture

THE SIZING OF THE UNPRIMED CANVAS:

Sizing is a solution made by dissolving Utrecht Professional high strength Rabbit Skin Glue in hot water. Its purpose is to penetrate and protect the fibers of

the canvas from any harmful absorption and action of the oil from the priming and oil paint layers which can lead to a slow disintegration of the canvas fibers over time.

GLUE SIZING RECIPE:

6 Level Tablespoons of Utrecht Rabbit Skin Glue 1 Quart of Hot Water:

This time tested recipe for making the sizing solution with Utrecht High Grade Rabbit Skin

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oxide [PW6], Zinc Oxide

[PW4] and barium sulfate ground in the proper low percentage of the finest quality linseed oil. The result is a very lean priming white. Fulfilling the indispensible requirements for a permanent oil painting ground. Utrecht Oil Priming White can also be used in the underpainting or painting in general.

THE CLASSIC RULE OF PAINTING FAT OVER LEAN



This fundamental rule of oil painting fat over lean is concerned with the permanent adhesion of the different oil paint

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than a fatter paint layer with a greater percentage of oil. The lean layer has the ability

The general rule in applying Utrecht Acrylic Mediums which are transparent or semiopaque is to brush on carefully without introducing air bubbles into the acrylic paint layers

Utrecht Acrylic Colors can be used in a wide range from watercolor techniques to heavy impasto painting.

UTRECHT GLOSS ACRYLIC MEDIUM is

the basic vehicle in the manufacture of Utrecht Acrylic Colors. It is of a syrupy consistency which dries clear and glossy. The degree of gloss and/or transparency (for glazing) can be controlled with the addition of water or Utrecht Matte Medium.

UTRECHT GLOSS ACRYLIC GEL MEDIUM has a heavy body that can produce very unique painting and glazing techniques. Mixing more color with the acrylic gel you can produce a thicker less transparent paint layer.

In the glazing technique mix more Utrecht Acrylic Gel with the Utrecht Acrylic Colors; then you can apply multiple transparent layers of various thickness producing unique coloristic effects.Generally when glazing, you coloristic effects. Generally when glazing, you will be applying a darker transparent layers of color over a slighter color so that the underlayer reflects light. A basic example is to tint the acrylic gel with a blue and apply thickly over a yellow layer of acrylic color. The result will be a visual green which will refract a greater amount of light because of the thickness of the gel compared to a thin glaze.

A very thick layer of Utrecht Acrylic Gel may take overnight to dry through. As the gel dries it gets clearer and clearer and you can glaze over it with different acrylic colors and degrees of thickness of the acrylic paint layer

UTRECHT ACRYLIC GEL OPAQUE: makes it possible to apply a thick texture of opaque layers of acrylic color. The degree of opaqueness can be controlled with addition of clear acrylic medium and gel. The paint layers or glazes with addition of opaque gel can produce unique coloristic effects.

UTRECHT MATTE MEDIUM is made to be mixed with Utrecht Acrylic Colors. It diffuses the light and reduces the natural gloss of the Utrecht Acrylic Colors.

UTRECHT ACRYLIC MATTE GEL MEDIUM produces similar results as the Utrecht Acrylic Gloss Gel Medium. However, it does not have a high gloss and is reduced in transparency. Different mixtures of Utrecht Matte Gel and Gloss Gel can produce different degrees of gloss transparency and

UTRECHT ACRYLIC IRIDESCENT TINTING MEDIUM mixed with Utrecht Acrylic Colors produces a dried paint layer with a more reflective and iridescent quality. Mix a little at a time until the desired result is achieved. The reflective and iridescent effect is greater with transparent colors than with opaque colors.

UTRECHT MODELING PASTE AND EXTENDER is a flexible material. It is made from precipitated calcium (sometimes called marble dust) pure titanium and acrylic polymer emulsion. It can be built up to thick impastos without cracking or flaking. One can tint Modeling Paste and Extender with colors and build up an underpainting which will be less expensive than with pure acrylic colors.

VARNISHING THE ACRYLIC PAINTING. The physical character of an acrylic painting has a toughness that makes varnishing it an option. If you want to produce an even gloss varnish for a certain look we suggest the following procedure:

Utrecht Gloss Acrylic Medium is the basic varnish for acrylic painting. It should be applied very carefully. Do not use rapid brush strokes since air bubbles can be introduced into a water-based paint very easily this way. The air bubbles would produce somewhat of a matte-like finish. You should always test the varnish on a little sample piece to make sure it is the degree of gloss that you want.

THE MANUFACTURE AND **TESTING OF SUPERIOR PROFESSIONAL UTRECHT OIL** AND ACRYLIC COLORS

Utrecht's four indispensible conditions that

FINEST TESTED INGREDIENTS

Utrecht carefully selects and uses only the finest quality, full strength pigments and vehicles regardless of cost.

This is a primary requirement in the production of Utrecht's highest professional quality permanent artists' oil and acrylic colors

PERMANENCY: The choice of pigments for Utrecht Oil Colors and Utrecht Acrylic Colors have been carefully tested and are universally recognized as permanent by artists and color experts.

See next page for a complete listing of the pigment composition and lightfastness classification.

PURITY: Each pigment and vehicle must be free of impurities, adulterants and fillers.

BRILLIANCE: Each pigment used must be as brilliant and clean in color tone as it can possibly be.

STRENGTH: Each pigment used must be high in color and tinting strength.

ADHESIVENESS AND PERMANENCY OF THE VEHICLE: An important OF THE VEHICLE: An important requirement both Utrecht Oil and Utrecht Acrylic Colors is that the vehicles must be stable, permanent and with superior adhesive properties

UTRECHT PROFESSIONAL ARTISTS' ACRYLIC COLORS

Supreme Professional Quality Utrecht is one of the first



professional artists permanent acrylic colors in the world. Utrecht introduced the line in 1957; after years of research and testing. This contributed to the greatest innovation in the history of artists colors in 500 years; i.e. since the invention of oil colors. All the different Utrecht Acrylic Colors and Gesso Colors are safely inter-mixable.

Utrecht Artists Acrylic Colors are carefully mixed and ground with Acrylic Polymer emulsion producing brilliant concentrated colors which dry to a tough permanent paint film.



Supreme Professional Quality

Utrecht Professional Oil Colors are carefully ground in the highest quality alkali refined Linseed Oil and/or Safflower oil of neutral natural acid; which produces brilliant excellent working properties.



PIDFESSIONIS

UTRECHT WHITE is a special non-yellowing oil painting white manufactured by Utrecht, carefully ground in safflower oil whose outstanding feature is that it is non-yellowing. It also produces a flexible and durable

paint film. Safflower oil is a thoroughly tested and generally accepted ehicle for artists' oil colors.

Utrecht White is safely intermixable with all the different Utrecht Oil Colors which are also intermixable with each other because of linseed oils chemical similarity to safflower oil.



- **Proper Maximum Pigment**
- Proper Minimum Vehicle
- No Adulterants or Fillers Used



Artists' colors are essentially manufactured by mixing and grinding pigments and vehicle. Pigment particles are insoluble; they are actually dispersed and suspended in the vehicle. Each pigment requires a different proper minimum percent of vehicle to produce a concentrated and workable "paste."

UTRECHT PROFESSIONAL

percentage may produce an impermanent paint film, which will become brittle and disintegrate with age. The improper excess of vehicle produces a color with undesirable properties, such as weakening its color strength and affecting its permanency.

PIGMENT PERCENTAGE AND MANUFACTURING COSTS

In terms of dollars and cents the pigment is generally the most expensive ingredient in the formulation.

UTRECHT FORMULA [A] is of excellent professional quality and has great money value. Utrecht's Professional Artists' Colors have a high percentage of pigment and therefore high manufacturing cost.

•Buying direct from Utrecht one of America's major manufacturers of artists colors makes it possible for the artist to purchase supreme professional quality at low prices.

FORMULAS B and C are lower in cost to manufacture. Formula B represents a good quality, but has less pigment in the formulation than Formula A.

Formula C is of poor quality that is called a "student grade" color. The pigment percent can be reduced with substitutions of inexpensive fillers or adulterants; also with excessive vehicle, whose presence can be improperly masked with the solidifying action of stabilizing agents. Use of substandard ingredients can also reduce costs.

MEASURING THE PERCENT OF PIGMENT IN A PAINT FORMULA : The amount of pigment in a formulation of an artist color can be discovered. This is done by mixing a measured amount of the color to be tested; with a measured amount of white paint. Simply, the more high grade pigment in the formulation, the stronger it will tint the white.

Utrecht uses a reflectometer to measure scientifically the tint strength of every oil and acrylic color formulation; and comparing the reading to a high standard established by Utrecht Manufacturing Corp.. This is to assure the artist that he is receiving the proper maximum of pigment and therefore, colors of high tint strength.

We will explain how you can test Utrecht Colors for yourself in the next section.



MANUFACTURING PROCESS

E ch color must be manufactured according to its individual physical and chemical characteristics. Each pigment is different and has various characteristics, for example, the particular hardness, size and shape of the pigment particle; also its specific gravity, vehicle absorption properties.



The pigment and vehicles of Utrecht Oil and Utrecht Acrylic Colors are carefully mixed and ground on the three roller mill several times until each color has achieved its optimum brilliance and intensity, and the proper maximum of pigment and minimum of the vehicle has been completely dispersed. UTRECHT'S PROPER CONSISTENCY:



and/or palette knife work. A two millimeter volume of paint is accurately measured and placed in the center of a glass plate; another plate is placed over it, on top of which is rested a twokilogram weight (over four pounds). The paint should not spread beyond a determined fixed point.

This is a very clear demonstration of the great confidence we at Utrecht have in the high professional quality of the artists colors we manufacture.

We will outline some significant but simple tests you can easily perform. These tests are accepted by artists and experts as useful aids in judging the quality of permanent artists colors.

An important part of this procedure is to make comparative tests with any other brand regardless of their selling price.



(1.) MASS TONE: Mass tone is the color quality of the paint as it comes out of the tube or jar. Spread the paint out smoothly with a with palette knife and

visually examine it for the intensity, brilliance and cleanness of color quality.

(2.) UNDERTONE: The undertone of a color can be revealed in two ways: Tinting the color with white or scraping the paint with a stiff palette knife very thinly over the surface of white paper. The whiteness of the surface should be partly visible through the paint.

Examine the undertone also for it's brilliance, intensity and cleanness of color quality. The color of the undertone can appear somewhat different than the mass tone.

The importance of the mass and undertone of a paint is obvious- that is one of the color qualities with which the artist will express himself.

(3.) WORKING QUALITY: The consistency of the paint as it comes out of the tube or jar should be tested for its working qualities. Use a brush, knife or even your fingertips. Oil colors have a different feel or texture from acrylic color.

If the paint is too fluid it will limit the range of painterly effects. If the paint is too sticky or tacky, it may be difficult to brush it out.

An artists' paint of the proper consistency can be applied from the smoothest paint layer to the thickest impasto in a controlled manner.

(4.) COLOR STRENGTH TEST: We suggest you make a color or tint strength comparison. of Utrecht Professional Acrylic Colors and Utrecht Professional Oil Colors against any other brand imported or domestic regardless of it's selling price.



Information on back of

Utrecht Tube

can be easily discovered with the simple color strength test. a) Begin by noting the color name or color index name and the pigment composition printed on the label of the color to be tested. For example, Cadmium Yellow Pale should not be compared

with Cadmium Yellow Deep or Hansa Yellow. Only colors of the same color name and pigment composition should be compared.



b) Carefully measure out one level teaspoon of the color to be tested and three level tablespoons of white. Use the same tube of white throughout the test. Make sure that there are no air pockets in the paint caused by careless placement in the spoon.









permanent artist's colors:

(1.) Determined and uncompromised effort to produce superior professional artist's colors regardless of cost.

(2.) Finest ingredients and formulation:

•Proper maximum of 100% pure, permanent and brilliant pigments.

•Proper minimum of 100% pure and permanent vehicles.

•100% free of all adulterants and fillers.

(3.) Expert knowledge and experience in formulation, manufacturing and testing.

(4.) Utrecht meets all known Health & Safety Standards of Art & Craft Institute.

Utrecht manufactures artists' colors with strict adherence to the highest artistic and scientific standards. Utrecht maintains quality control over every aspect of production, from the initial stages of formulation to the final automatic filling of tubes, jars and cans.

FORMULA [A]:

The proper maximum of the highest grade 100% pure pigment and minimum of vehicle is an indispensable requirement of the Utrecht Supreme Professional Quality Colors. As represented by the diagram Formula A.

Utrecht's proper formulations contribute to the high color (or tinting) strength, brilliance, proper drying time, working qualities, consistency, permanence and durable paint film.

UTRECHTS' PROPER FORMULATION AND PAINT FILM

Utrecht's properly formulated and manufactured professional artists' colors, the vehicle permanently binds or adheres the pigment particles together. It also contributes the adhesion of the different paint layers and to the canvas support through the centuries.

For example, less vehicle than the proper

YOU CAN TEST UTRECHT PROFESSIONAL OIL AND ACRYLIC COLORS AGAINST ANY BRAND.

Discover For Yourself The High Professional Quality of UTRECHT ARTISTS' COLORS

Since 1961, Utrecht has distributed millions of copies of instructions on how to test and compare Utrecht Oil and Acrylics with any other brand regardless of cost, domestic or imported.

FOUR IMPORTANT TESTS FOR QUALITY YOU CAN EASILY PERFORM

Utrecht has consistently recommended over the years that artists test and immediately discover for themselves the superior professional quality of Utrecht Professional Oil Colors and Utrecht Professional Acrylic Colors.

c) Thoroughly mix the color and white with a stiff palette knife until all streaking has disappeared.

d) First spread smoothly with a palette knife the tinted mixtures of Utrecht Oil or Acrylic color on half of a piece of canvas or paper. Next spread the other brand tinted color next to it. The brand which is stronger or richer in color has the greater amount of pigment in the formula and is of higher quality. The batch which has the paler tint has a smaller percentage of pigment in the formula and is of poorer quality.

It is important to remember that tint strength of different colors (and different pigment composition) are not necessarily equal. There can be variations. For example: a high grade Phthalocyanine Blue has a stronger tint strength than a high grade Pure Cobalt Blue. What is significant is the comparative tint strengths of two or more brands of same color name and pigment composition.

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WASHINGTON, D.C. . DETROIT, MI. . CHICAGO, ILL. . BERKELEY, CA. . SAN FRANCISCO, CA. . WEST LOS ANGELES

to absorb some of the oil from the fat or even lean paint layer on top of it. This absorption produces adhesion of the paint layers by anchoring the top oil paint layers into the bottom lower leaner layers.

Therefore, one can apply either a lean or fat oil paint iayer over a dry absorbent lean oil paint layer. This produces a permanent adhesion between the paint layers. However, a fat, non-absorbent dried oil paint layer cannot be painted over because neither a lean or fat paint layer. However, a fat paint layer will permanently adhere to it. However, the final paint layer can be either lean or fat.

Generally speaking, the three simple ways to oil paint follow the rule of painting over a dry lean paint layer. (a) Use a lean oil painting medium sparingly (b) In the underpainting, mix colors with a little of any Utrecht Oil White, all of which are lean. (c) Of course, if one wishes the final paint layers can be for one wishes, the final paint layers can be fat since they will not be overpainted.

However, in acrylic painting the very high adhesive strength of the acrylic polymer emulsion vehicle produces the adhesion of the different acrylic paint layers- which may be applied in a random seauence.

Therefore, the rule of painting fat over lean or lean over lean applies to only oil painting- it does not apply to acrylic painting

UTRECHT OIL PRIMING PROCEDURE: The Utrecht Oil

Priming can be applied with either a large trowel shaped knife or a large stiff bright bristle brush.

The Thinning of Utrecht Oil Priming White with lean gum turpentine to a workable consistency enabling easy application over the sized canvas

Never add oil to Utrecht Oil Priming White, this would make the priming fatter. Its leaness must always be preserved

Begin by mixing small amounts of gum turpentine to the Utrecht Oil Priming White with a palette knife. During the mixing some paint will accumulate on the palette knife which can be removed with the aid of another palette knife.

One way to test if the workable consistency has been reached is to pick up a moderate amount of paint on the knife and shake it gently. If any paint falls from the knife it is ready to use.

PRIMING WITH A PALETTE KNIFE: Begin by placing a portion of the thinned Utrecht Oil Priming White in the center of the sized canvas. Spread it in one direction and then in the opposite and in a diagonal direction. This will allow you to work it into the texture of the

always, on one area at a time.

Priming The Edges: Place a small portion of white priming in a line parallel to and about two or three inches from the edge of the canvas and then spread the priming towards the edge. To avoid the formation of a ridge by the stretcher, raise the canvas gently from underneath with your fingertips.

Painting The Sides: After the canvas is primed some artists paint the sides of the canvas where it has been tacked or stapled onto the stretchers which has already been double-sized. Thin the white or tinted priming with turpentine to brushable consistency and then carefully apply with a No. 12 Utrecht bright bristle brush.

The Optional Second Priming: The second white priming can be applied the next day or any time after the priming has dried. This will somewhat reduce the texture of the canvas. double primed canvas is not technically necessary, but is solely determined by the kind of surface the artist wishes to paint on

To Finish:The artist may eliminate any unevenness by gliding a clean palette knife over the whole surface of the primed canvas

PRIMING WITH A BRISTLE BRUSH: Using a Utrecht large bright bristle brush size 12 - 24 a Offecht large bright bristle brush size 12 - 24, apply the priming by stroking the brush in all directions with a wrist-waggly motion, working it well into the weave. After evenly distributing the priming over the whole surface, finish by going over lightly with a clean brush carefully in line with the weave.

TONE GROUNDS: Tone grounds may be directly applied on the sized canvas or over the first white priming. A small amount of any oil color or mixture needs to be added to tint the Utrecht Oil Priming White. There is an advantage of mixing quick drying oil colors such as burnt or raw umber to speed up the

OIL PAINTING MEDIUMS

The Ingredients of the Oil Painting Medium. Professional oil painting mediums can be easily and economically made from time-tested ingredients : each one with a definite function and purpose. They are stand oil, linseed oil and damar varnish five pound cut and gum turpentine. (1.) PURE GUM TURPENTINE. Gum

Turpentine is a common thinner or dilutant for oil paints and varnishes. It is a most valuable diluting agent since it evaporates quickly without leaving any residue. Avoid excessive use of pure gum turpentine, by itself it can weaken the bond between pigment particles and the linseed oil binder in oil paint. Turpentine is, of course, absolutely lean.

UTRECHT DAMAR **CRYSTALS** are derived from trees growing in the Malay states and in the East Indies. Damar is bright, clear, transparent and ranges in color from water white to deep straw. The best grade available is Utrecht Singapore Damar Crystal, No.1. It is soluble in gum turpentine. Damar has stood the test of time and retains it's colorless appearance. It provides an excellent protection from the

provides an excellent protection from the atmospheric gases and dampness and is not subject to oxidation.

Damar gives great depth to colors as well as clarity. As part of the painting medium it contributes to a gloss effect which can be decreased by the addition of more turpentine. It also renders a certain tackiness to the painting medium which contributes a degree of control of brushwork.

Making Damar Varnish 5 Lb Cut: Damar Varnish five pound cut is the basic ingredient in making oil painting mediums and varnishes is made from a recipe based on a ratio of five pounds of damar crystals dissolved in one gallon of gum turpentine. This ratio is a derivation of the term five pound cut.

UTRECHT READY-TO-MAKE DAMAR VARNISH UNIT: Utrecht, in 1962, developed and introduced Ready-to-Make Damar Varnish unite This for the first time

ready-to-Make Damar Varnish units. This, for the first time, greatly simplified the preparation of Damar Varnish five pound cut by supplying a quart container with 10 1/2 ounces of Singapore Damar Crystals #1 in a mesh bag. All that is necessary is to pour one pint of gum turpentine into the container and then close it. Make sure the string of mesh bag hangs outside the container, held firmly in place by the lid. Occasionally shake the container to aid the dissolving of the crystals, making sure the bag is completely submerged. Within 24-36 hours it will be ready. After which, remove the bag. Utrecht has added 1/2 oz, extra of the damar crystals to allow for any

undissolved remainder. Damar 5 Lb.. Cut will appear slightly cloudy

due to it's natural waxes which have an important protective function for the paint layers When dry the Damar Varnish film will become clear and transparent.

Making Damar 5 Lb Cut with a pound of **Damar Crystals:** It is very simple to make it yourself. Wrap one pound of damar crystals in a lint free lightweight cotton rag. Tie it at the top, through this you can place a rod or stick. Pour 25 ounces of gum turpentine in a wide mouth quart jar. Then lower the bag into the container, submerging it completely into the container-submerging it completely into the turpentine. Place the rod over the top of the container and cover. Damar 5 Lb. cut is produced after 24-36 hours. After which,

(3.) UTRECHT ALKALI REFINED

Utrecht Linseed Oil is much leaner than

Note: It is important to use oil colors on the peak of their adhesive strength.

Pure Stand Oil added to oil color will give a fluid quality to the paint which has a tendency to dry to a smooth paint film free of brush marks. The addition of various amounts of damar varnish or gum turpentine can modify the degree of accent of brush marks and also speeds drying time.

BASIC RECIPES FOR PROFESSIONAL **OIL PAINTING MEDIUMS**

The basic recipes for professional oil painting mediums are listed below. The leaner oil painting mediums are designed for general painting. This will contribute to maintaining he leaness and the permanent adhesion of the different paint layers in the work. The fatter oil painting mediums are only designed for final paint layers and for alla prima painting; (i.e. painting wet oil paint into wet oil paint.)

It is very easy and economical to make one's own painting mediums and varnishes. Also most important is that the artist can custom make them by varying the proportions of the time tested ingredients to meet individual artistic requirements.

An important property of degree of leaness or fatness of the oil painting medium can be easily controlled (a) by controlling the ratio of stand oil to gum turpentine. For example, as we increase the percentage of stand oil this will increase the degree of fatness. Conversely, increasing the percentage of gum turpentine will increase the leaness. (b) By introducing the leaner Utrecht Linseed Oil the artist can reduce the fatness of the stand oil.

Using this approach one can modify the wide range of recipes which we have listed below

SUGGESTED BASIC RECIPES:

Leanest Basic Painting Medium:

1 Part: Utrecht Linseed Oil 5 Parts: Gum Turpentine

Leaner Basic Painting Medium:

1/2 Part: Utrecht Linseed Oil 1/2 Part: Utrecht Stand Oil

5 Parts: Gum Turpentine

Lean Basic Painting Medium:

1 Part: Utrecht Stand Oil 5 Farts: Gum Turpentine

All Purpose Lean Painting and Glazing Medium: (Many Artists use this recipe from start to finish)

1 Part: Utrecht Stand Oil 1 Part: Damar Varnish 5 Lb., Cut

5 Parts: Gum Turpentine

Fat Stand Oil -Damar Concentrate: ran. Orecut Stand On

1 Part: Damar Varnish 5 Lb Cut.

3 Parts: Gum Turpentine

Very Fat Stand Oil - Damar Concentrate: 2 Parts: Utrecht Stand Oil

1 Part: Damar Varnish 5 Lb Cut

SOME BASIC RULES IN USING OIL PAINTING MEDIUMS. The time-tested rule of painting fat over lean or lean over lean will determine the use of oil painting medium described earlier

The final oil paint layers or in alla prima The final oil paint layers or in alla prima painting (painting wet paint layers into wet); a fatter painting medium can be used, such as the stand oil-damar concentrates (which are fat and very fat). Very little is needed to accomplish it's basic purpose. One way of using it is to dip the tip of a palette knife in a mixture of stand oil-damar concentrate and mix it with only two inches of paint as it comes out of the tube. This will increase its brilliance and add toughness and durability to it. We wish to note that only a few artists use the fat or very fat oil painting mediums. or very fat oil painting mediums.

A fat final paint layer to becomes glossy and "non-porous", which protects it against the absorption of atmospheric dirt. However it can not be overpainted because of it's excessive fat and non-porous paint layer.

Of course, in alla prima painting the artist can use any of the oil painting mediums listed above.

> UTRECHT Ingredients: Clear colloidal transparentizer ground in nonyellowing safflower oil. The non-yellowing property is

utreci

FLEX

GEL

GLAZING MEDRA

especially important for thicker applications of oil paint. FLEX-GEL is an Oil Painting and Glazing Medium manufactured by Utrecht of a similar buttery consistency as Oil Paint. This important factor opens up a whole new range of painterly effects unattainable by fluid painting and glazing mediums. FLEX-GEL increases the artists flexibility in oil paint textures.

FLEX GEL



The purpose of the final coating of picture varnish is to give the painting an even gloss and contribute to the protection of the painting from absorption of atmospheric dirt and moisture and moisture.

VARNISHING AN OIL PAINTING. There are two basic varnishes for oil painting. **Retouching Varnish:**

5 Parts: Damar Varnish 5 Lb. Cut

13 Parts: Gum Turpentine

Final Damar Picture Varnish:

4 Parts: Damar 5 Lb. Cut 1 Part: Gum Turpentine

up to 5% stand oil can be added.

There is a recommended procedure in variishing a picture. **Retouching Varnish** is considered a temporary varnish and it is applied when the surface of the painting is dry to the touch. **Final Picture Varnish** is applied only when the painting is thoroughly dry. A painting with a moderate impasto or thinly applied paint layers can receive a final picture varnish anytime after six months of drying. A painting with heavy impasto should dry between one and two years after completion of the painting.

Varnish a picture on a day with low humidity and a painted surface free from moisture. Make sure that the large bristle brush you use is free of moisture. Also, clean the surface of the painting with a soft, lint-free cloth.

Lay the painting in a flat or upright position on your easel and apply the varnish methodically one area at a time to make sure every part is covered. Work in a correct angle to the light so you can see the areas which have not been touched. After a few days dry spots may appear, this is caused by greater absorbency in certain areas. Simply rub a small amount of Utrecht Linseed Oil in that area to restore the normal shine and carefully wipe off any excess.

LONG AND SHORT OIL PAINT

Paint Quality and Oil Painting Mediums. The consistency and paint quality of oil colors can be controlled with the use of the oil painting mediums. The two fundamental oil paint qualities are called Short and Long Paint.

SHORT OIL PAINT : The oil paint as it comes out of the tube is called short paint. It has a stiff buttery quality which retains it's brush marks easily; and when stippled with a palette knife creates many short crisp peaks of paint, from which the term is derived. Short paint produces a paint quality not easily obtained by any other means.

LONG OIL PAINT : Short paint can be made long with a mixture of a little stand oil or painting medium. with stand oil in it. You will notice far fewer pointed peaks of paint after

suppling with a palette knile. The peaks lever off gently. Long paint tends to leave no brush marks. It can produce a fluid brush and palette knife work which is very difficult to duplicate with short paint.

With the controlled use of oil painting mediums the artist can produce a whole range from short to long paint. This contributes significantly to the artists ability to express himself in terms of a great variety of paint engine variety of paint quality.

THE GLAZING TECHNIQUE

The classic glazing technique is an important and special means to mix colors. The glazing technique which has been used by artists for over five centuries is essentially the application of a thin transparent veil of a darker color which has been mixed with all-purpose lean painting and glazing medium over another dry lighter oil color to produce brilliant coloristic effects.

A parallel can be made by placing a blue color cellophane over a yellow color with green as the result

The glazing technique is used for both oil and acrylic painting

UTRECHT PROFESSIONAL ACRYLIC COLORS, MEDIUMS AND VARNISHES

Acrylics have proven to be today's most versatile artist's colors, varnishes and mediums. Utrecht Acrylic mediums provide an entirely different approach and can produce very unique painterly effects which are different from the oil painting technique. Two or more Utrecht Acrylic Mediums can be mixed together to expand the range of effects

The high adh ive strength and fast drying of



remove the bag.

(3.) UTRECHT ALKALI REFINED LINSEED OIL: Linseed oil is the universally accepted vehicle for grinding Professional Artists Oil Colors. It is produced by processing the seeds of the flax plant. It is then refined by removing all the impurities. Utrecht Linseed Oil has a neutral natural acid which very important. This makes

it ideal for manufacturing high quality professional oil colors with a tough and durable paint film and permanent in color.

Utrecht Stand Oil. This leaness is an indispensible property for a vehicle in the production of Professional Artists Oil Colors. The leaness of the linseed oil is also an important consideration in the formulation of when dry it produces a tough, durable permanent and adhesive paint film; which can be overpainted.

drying of the colored tone ground. A tone ground is thinned and applied in the same manner as the white priming.

 After priming is complete, wash your hands thoroughly, with soap and warm water

DRYING TIME: The oil priming should dry 10-14 days at normal room temperature before being painted on. If you prepare several canvases at one time then you will have a stock that is dry and ready to paint on.

UTRECHT OIL AND ACRYLIC PAINTING MEDIUMS & VARNISHES

The proper use of professional painting mediums for oil or acrylic painting is an important tool that can expand the range of paint quality, textures and coloristic effects the artist can produce. It can also contribute significantly to the brilliance and permanency of the painting.

(4.) UTRECHT STAND OIL. Utrecht Stand Oil is a heavy-bodied polymerized oil that is highly recommended ingredient of the oil painting medium because of its superior qualities. Utrecht Stand Oil is NTAME OF non-yellowing, produces paint film of exceptional durability, flexibility and tough nature which resists the action of solvents. Utrecht Stand Oil is much fatter than linseed oil. and is a slower drier. Stand oil by itself

very fat. The drying time can be shortened with addition of gum turpentine in the oil painting medium, as well as reducing it's fatness

Utrecht Stand Oil is made from linseed oil that has been heated to over 500° in a vacuum During the heating the molecules of linseed oil unite to form larger molecules and this thickens the stand oil. These new molecules are highly resistant to yellowing, cracking and disintegration.

· FLEX-GEL can render the thinnest to heaviest impasto layers of opaque oil color trans-parent. It can be applied by brush or painting knife. This can be done while retaining the oil colors' buttery consistency and without making the paint fluid

• Very little FLEX-GEL should be used with oil colors to accomplish its' purpose.

Acrylic Polymer Emulsion Vehicle is the fundamental property of the unique technique of acrylic painting.

THINNING OF UTRECHT ACRYLIC COLORS: Utrecht Acrylic Colors, Gesso Colors, Acrylic Mediums and Varnishes thin with water and dries water-resistant. Excessive thinning with water is never recommended because it may reduce the adhesion between the acrylic polymer emulsion and the pigment particles. However, when producing thin, transparent washes of acrylic colors it is recommended to thin with a mixture of 50% water and 50% acrylic medium.

The process of acrylic painting has great freedom The paint layers can be applied in any sequence governed solely by the painterly and coloristic effects the artist wishes

You cannot mix Utrecht Acrylic Colors with Oil Paint, turpentine, damar varnish or any oil painting medium.

4

UTRECHT LOCATIONS COAST-TO-COAST : BROOKLYN, N.Y. NEW YORK CITY . BOSTON, MASS. . PHILADELPHIA, PA.



HIGHEST GRADE 100% PURE PIGMENT COMPOSITION OF UTRECHT SUPERIOR *PROFESSIONAL ARTISTS COLORS

GUARANTEED FINEST QUALITY PERMANENT 100% PURE INGREDIENTS EXPERTLY FORMULATED MANUFACTURED AND TESTED

• HIGH PIGMENT CONCENTRATION AND

HIGH COLOR STRENGTH • ALL COLORS 100% FREE OF ADULTERANTS **OR FILLERS**

HIGHEST GRADE PERMANENT

- **100% PURE PIGMENTS** • PROPER CONSISTENCY AND EVEN TEXTURE COLORS OF OPTIMUM
- BRILLIANCE AND INTENSITY

HEALTH LABELING STANDARD CONFORMS TO ASTM D4236 Utrecht Manufacturing Corporation is an industry member of the Arts & Crafts Materials Institute. Utrecht supports the voluntary labeling standard of the Institute.



THE AP SEAL: Most Utrecht Colors bear the AP Approved Products Seal of the Art and Craft Materials Institute, Inc. are certified as being non-toxic

in a program of toxilogical evaluation by a medical expert, subjected to review by the Institute Toxilogical Advisory Board, to contain no materials in sufficient quantities to be toxic or injurious to humans, or to cause acute or chromic health problems.

HEALTH LABEL: DO NOT SPRAY, APPLY. Colors containing soluble Cadmium and/or Cobalt/Nickel. LIGHTFASTNESS CATEGORIES:

 LIGHTFASTNESS 1 = EXCELLENT Represents excellent lightfastness. The great majority of colors Utrecht manufacturers are extremely permanent.

 LIGHTFASTNESS 2= VERY GOOD Represents very good lightfastness. These colors are classified as durable. LIGHTFASTNESS 3 = MODERATE Represents moderate lightfastnes

- Utrecht has only one pigment in this category: Alizarin Crimson.

CODE: A = ACRYLIC W = WATERCOLOR $\mathbf{0} = OIL$

VEHICLES:

ACRYLIC: 100% Acrylic Polymer Emulsion OIL: Alkali refined Linseed oil and/or Safflower oil. WATERCOLOR: Pure Gum Arabic

YELLOWS

Azo Yellow Medium , A Hansa Yellow 4 GX (PY 73) Lightfastness: 1 • Transparent

Azo Yellow Orange, A Diarylide Yellow HR 70 (PY83) Lightfastness: 1 • Transparent

Pure Cadmium Yellow Lemon, A Pure Concentrated Cadmium Zinc Sulfide. (PY 35)Lightfastness: 1 • Opaque

Pure Cadmium Yellow Light, A,W Pure Concentrated Cadmium Zinc Sulfide' (PY 35) Lightfastness: 1 • Opaque

Pure Cadmium Yellow Medium, A Pure Concentrated Cadmium Sulfide (PY 37) Lightfastness: 1 • Opaque

Pure Cadmium Yellow Deep, A, W Pure Concentrated Cadmium Sulfide (PY 37) Lightfastness: 1 • Opaque

Cadmium Yellow Pale, O Pure Concentrated Cadmium Zinc Sulfide (PY 35) with barium sulfate Lightfastness: 1 • Opaque

Cadmium Yellow Light, O Pure Concentrated Cadmium Zinc Sulfide [PY 35] with barium sulfate Lightfastness: 1 • Opaque

Cadmium Yellow Medium, O Pure Concentrated Cadmium Sulfide [PY 37] with barium sulfate, Lightfastness: 1 • Opaque

Cadmium Yellow Deep, O Pure Concentrated Cadmium Sulfide [PY 37] with barium sulfate, Lightfastness: 1 • Opaque

Utrecht Yellow, A Hansa Yellow 4GX (PY 73) Lightfastness:1 • Transparent

Utrecht Yellow, O Hansa Yellow 4GX (PY 73), Zinc Oxide (PW4) Lightfastness:1 • Semi-Transparent

Yellow Oxide Ochre, A, Synthetic Hydrated Yellow Iron Oxide.(PY42) Lightfastness: 1 • Opaque Yellow Ochre, O, W Natural Hydrated Yellow Iron Oxide. (PY43) Lightfastness: 1 • Opaque

Zinc Yellow Hue, O Hansa Yellow 10G-41 (PY3) Zinc Oxide (PW4) Lightfastness: 2 • Semi-transparent

ORANGES

Pure Cadmium Orange, A,W Pure Concentrated Cadmium Sulfo - Selenide (PO 20) Lightfastness: 1 • Opaque

Cadmium Orange, O Pure Concentrated Cadmium Sulfo-Selenide [PO 20]with barium sulfate Lightfastness: 1 Opaque •

Gesso Color Hansa Orange , A Hansa Yellow SR [PY 1 Modified] and Perinone Orange (PO 43) Lightfastness: 2 • Transparent

Indo Orange Red , A Vat Orange GR (PO 43) Lightfastness: 1 • Semi-Transparent

Utrecht Orange, O Hansa Yellow 5R (PY1 Modified) Indo Orange (PO43) and Zinc Oxide (PW 4) Lightfastness: 2• Semi-Transparent

Utrecht Orange, A Hansa Yellow 5R (PY1 Modified) Indo Orange (PO43)Lightfastness: 2 • Semi-Transparent

REDS

Alizarin Crimson, A, O, W Synthetic 1:2 Dihydroxyanthraquinone on Alumina Base (PR83) Lightfastness: 3 • Transparent

Pure Cadmium Red Light, A, W Pure Concentrated Cadmium Seleno- Sulfide [PR 108] Lightfastness: 1 • Opaque

Pure Cadmium Red Medium, A Pure Concentrated Cadmium Seleno- Sulfide [PR 108]Lightfastness: 1 • Opaque

Pure Cadmium Red Deep, W Pure Concentrated Cadmium Seleno- Sulfide [PR 108] Lightfastness: 1 • Opaque

PR 1081 Lightastree Pure Cadmium Red Extra Deep, A Pure Concentrated Cadmium Seleno-[PR 108] Lightfastness: 1 • Opaque

Cadmium Red Light, O Pure Concentrated Cadmium Seleno-Sulfide [PR 108] with barium sulfate Lightfastness: 1 • Opaque

Cadmium Red Medium, O Pure Concentrated Cadmium Seleno-Sulfide [PR 108] with barium sulfate Lightfastness: 1 • Opaque

Cadmium Red Deep, O Pure Concentrated Cadmium Seleno-Sulfide [PR 108] with barium sulfate Lightfastness: 1 • Opaque

English Red Light, O Synthetic Red Iron Oxide (PR101) Lightfastness: 1 • Opaque

Gesso Color Alizarin Crimson, A Synthetic 1:2 Dihydroxyanthraquinone on Alumina Base. [PR 83] Lightfastness: 3 • Transparent

Gesso Color Naphthol Red Medium,A Naphthol AS-D (PR 112) Lightfastness: 2 • Transparent

Light Portrait Pink, A Napthol HF 35 (PR 188) Benzimidazolone (PO36) and Titanium Dioxide (PW6) Lightfastness: 1- Opaque

Naphthol Crimson,A Naphthol Carbamide (PR170 F5Rk) Lightfastness: 2 • Transparent

Naphthol ITR Red Light , A Naphthol Red FRLL (PR9) Lightfastness: 2 • Opaque

Naphthol Permanent Red Light (in Jars) A Naphthol Red (PR-112) FGR Lightfastness: 2 • Opaque

Naphthol Permanent Red Deep, A Naphthol Carbamide (PR 170) F5RK Lightfastness: 2 • Opaque

Naphthol Red Light, O Naphthol FGR (PR112) Zinc Oxide (PW4) Lightfastness: 2 • Semi-Opaque

Permanent Violet, W Complex Silicate of Sodium and Aluminum with Sulfur [PB 29] and Carbazole Dioxazine [PV23 RS], Lightfastness: 2 • Transparent Quinacra Violet, A Quinacridone Violet (PV19) Lightfastness: 1 • Transparent Ultramarine Violet, O

Complex Silicate of Sodium and Aluminum with Sulfur (PV15) Lightfastness: 1 • Translucent

BLUES

Brilliant Blue , A Copper Phthalocyanine (PB 15), Chlorinated Copper Phthalocyanine (PG7) and Titanium Dioxide (PW6) Lightfastness: 1 • Opaque

Brilliant Blue Purple, A Complex Silicate of Sodium and Aluminum with Sulfur (PB29) Titanium Dioxide (PW6) Lightfastness: 1 • Opaque

Pure Cerulean Blue, O, A, W Oxides of Cobalt and Chromium (PB36) Lightfastness: 1 • Opaque

Pure Cobalt Blue, A, W, O Oxides of Cobalt and Aluminum (PB28) Lightfastness: 1 • Translucent Cerulean Blue Hue, O

Copper Phthalocyanine (PB15) and Zinc Oxide (PW4) Lightfastness: 1 • Semi-Opaque

Cobalt Blue Deep Hue, O Complex Silicate of Sodium and Aluminum with Sulfur (PB29) Lightfastness: 1 • Translucent

Cobalt Blue Hue, O Complex Silicate of Sodium and Aluminum with Sulfur (PB29) Lightfastness: 1 • Translucent

Gesso-Color Phthalocyanine Blue,A Copper Phthalocyanine [PB 15] Lightfastness: 1 • Transparent

Gesso-Color Ultramarine Blue, A Complex Silicate of Sodium and Aluminum with Sulfur [PB 29] Lightfastness: 1 • Translucent

Phthalocyanine Blue, O, A, W Copper Phthalocyanine (PB15) Lightfastness: 1 • Transparent

Turquoise Deep, A Copper Ph(halocyanine (PB 15) and Chlorinated Copper Phthalocyanine (PG7) Lightfastness: 1 • Transparent

Ultramarine Blue, A, O, W Complex Silicate of Sodium and Aluminum with Sulfur (PB29) Lightfastness: 1 • Translucent

Ultramarine Blue Light, O Complex Silicate of Sodium and Aluminum with Sulfur (PB29) Lightfastness: 1 • Translucent

Ultramarine Blue Deep, O Complex Silicate of Sodium and Aluminum with Sulfur (PB29) Lightfastness: 1 • Translucent

Copper Phthalocyanine (PB 15) and Titanium Dioxide (PW6) Lightfastness: 1 • Semi-Transparent

Utrecht Blue, O Complex Silicate of Sodium and Aluminum with Sulfur (PB29) and Copper Phthalocyanine (PB15) Lightfastness: 1 • Transparent

GREENS

Chromium Oxide Green, A, O Anhydrous Chromium Sesquioxide (PG17) Lightfastness: 1 • Opaque

Emerald Green, A Chlorinated Copper Phthalocyanine (PG7), Hansa Yellow FGL (PY97) and Titanium Dioxide (PW6) Lightfastness: 1 • Opaque

Gesso-Color Phthalocyanine Green, A Chlorinated Copper Phthalocyanine [PG 7] Lightfastness:1 • Transparent

Green Earth Hue, O Chlorinated Copper Phthalocyanine (PG 7) Natural Hydrated Yellow Iron Oxide (PY43) Amorphous Bone Carbon Black (PBk9) Lightfastness: 1 • Semi-Transparent

Hookers Green Permanent, A Chlorinated Copper Phthalocyanine (PG7), Hansa Yellow 4GX (PY73) Synthetic Hydrated Yellow Iron Oxide (PY42) and Amorphous Bone Carbon Black (PBk9) Lightfastness: 1 • Semi-Transparent

Phthalocyanine Green, A, O, W Chlorinated Copper Phthalocyanine (PG7) Lightfastness: 1 • Transparent

Permanent Green Light ,W Hansa Yellow 10G-41 [PY3] Chlorinated Copper Phthalocyanine [PG7] Lightfastness : 2 • Transparent

Viridian Hue, A Chlorinated Copper Phthalocyaninc+(PG7), Natural Iron Oxide (PBr7) and Titanium Dioxide (PW6), Lightfastness: 1 • Opaque

BROWNS Burnt Sienna, A, O, W Calcined Natural Iron Oxide, (PBr7) Lightfastness: 1 • Semi-Transparent

Burnt Umber, A, O, W Calcined Natural Iron Oxide (PBr7) Lightfastness: 1 • Opaque

Gesso-Color Burnt Sienna, A Calcined Natural Iron Oxide [PBr7] Lightfastness: 1 • Opaque

Gesso-Color Burnt Umber Calcined Natural Iron Oxide [PBr7] Lightfastness:1 • Opaque

Raw Sienna, A, O, W Natural Iron Oxide (PBr7) Lightfastness: 1 • Opaque

Raw Umber, A, O, W Natural Iron Oxide (PBr7) Lightfastness: 1 • Opaque

BLACKS

GRAYS

Paynes Gray, A, O,W

METALLIC HUES

WHITES

Gesso-Color Mars-Ivory Black Synthetic Black Iron Oxide [PBk 11] and Amorphorous Bone Carbon Black [PBk9) Lightfastness:1 • Opaque Ivory Black, A, O, W Amorphorous Bone Carbon Black (PBk9) Lightfastness: 1 • Opaque

Mars Black, O,A Synthetic Black Iron Oxide (PBk11) Lightfastness: 1 • Opaque

Utrecht Black, O Synthetic Black Iron Oxide [PBk11] Amorphous Bone Carbon Black [PBk9) Lightfastness: 1 • Opaque •An important unique combination of the best qualities of Ivery Black (an intense black with high tim strength) and Mars Black (a dense, opaque black, with heavier pigment particles)

Gesso-Color Neutral Grey, A Amorphorous Bone Carbon Black [PBK9] Natural Iron Oxide [PBr7] and Titanium Dioxide [PW 6], Lightfastness:1 • Opaque

Medium Gray, A Amorphorous Bone Carbon Black (PBk9), Natural Iron Oxide (PBr7) and Titanium Dioxide (PW6) Lightfastness: 1 • Opaque

Sulfur (PB29) Lightfastness: 1 • Semi-Transparent

Amorphorous Bone Carbon Black (PBk9) and Complex Silicate of Sodium and Aluminum with

Iridescent Tinting Medium, A Titanium Coated Mica Flakes and Amorphorous Carbon [PBk7] Lightfastness:1 • Translucent

Fermanent Bronze, A Titanium Coated Mica Flakes and Amorphous Carbon (PBk7) Synthetic Hydrated Yellow Iron Oxide (PY 42) Lightfastness: 1 • Opaque

Permanent Silver, A Titanium Coated Mica Flakes and Amorphous Bone Carbon Black (PBk7) Lightfastness: 1 • Translucent

Permanent Gold, A Titanium Coated Mica Flakes.and Synthetic Hydrated Yellow Iron Oxide (PY42) Lightfastness: 1 • Translucent

Gesso-Color Unbleached Titanium, A Titanium Dioxide [PW 6], Natural Iron Oxide [PBR7] Lightfastness:1 • Opaque

Permanent Chinese White, W Titanium Dioxide [PW6] Lightfastness: 1

Titanium White, A Titanium Dioxide (PW6) Lightfastness: 1 • Opaque

Utrecht Professional Gesso, A

Utrecht Artists Gesso, A

Titanium White, O Pigment: Titanium Dioxide (PW6) and Zinc Oxide (PW4), Lightfastness: 1 • Opaque

Unbleached Titanium, A Titanium Dioxide (PW6) and Natural Iron Oxides (PBr7), Lightfastness: 1 • Opaque

Utrecht Non-Yellowing White, O Titanium Dioxide [PW 6] and Zinc Oxide [PW4] Lightfastness:1 • Opaque • The Vechicle for Utrecht White is Non-Yellowing Safflower Oil, which is chemically similar to Linseed Oil and is therefore safely inter-mixable with all Utrecht Oil Colors.

Gesso Color Hansa Yellow Medium, A Hansa Yellow 4GX (PY 73) Lightfastness: 1 • Transparent

Gesso Color Yellow Oxide , A Synthetic Hydrated Iron Oxide [PY 42] Lightfastness: 1 • Opaque

Hansa Yellow Pale, A Hansa Yellow 10G-41 (PY3) Lightfastness: 2 • Transparent

Hansa Yellow Light, A Hansa Yellow 10G-41 (PY3) Lightfastness: 2 • Transparent

Hansa Yellow Light, O Hansa Yellow 4GX (PY73), Zinc Oxide (PW4) Lightfastness: 1 • Semi-Opaque

Mars Yellow, O Synthetic Hydrated Yellow Iron Oxide (PY42) Lightfastness: 1 • Opaque

Naples Yellow Hue, O Hansa Yellow X (PY75) Synthetic Hydrated Yellow Iron Oxide (PY42) and Zinc Oxide (PW4) Lightfastness: 2 • Opaque

Quinacra Red, A Quinacridone Red (PV 19) Lightfastness: 1 • Transparent

Red Oxide, A Synthetic Red Iron Oxide (PR101) Lightfastness: 1 • Opaque

Utrecht Red, A Naphthol FGR (PR112) and Hansa Yellow 4GX (PY 73) Lightfastness: 2 • Semi-Transparent

Utrecht Red, O Naphthol AS-D (PR112) and Hansa Yellow 4GX (PY 73) Lightfastness: 2 • Semi-Transparent

VIOLETS

Dioxazine Purple, A Carbazole Dioxazine (PV 23RS) Lightfastness: 2 • Transparent

Gesso Color Dioxazine Purple, A Carbozole Dioxazine [PV 23RS] Lightfastness: 2 • Transparent

Manganese Violet, O Manganese Ammonium Pyrophosphate (PV16) Lightfastness: 1 • Transparent Permanent Green, A Pure Concentrated Cadmium Zine Sulfide (PY 35) Chlorinated Copper Phthalocyanine (PG7). Lightfastness: 1 • Opaque

Permanent Green, O Chlorinated Copper Phthalocyanine (PG7)and Zinc Oxide (PW4) Lightfastness: 1 • Semi-Opaque

Sap Green, O Chlorinated Copper Phthalocyanine (PO7) Hansa Yellow X (PY75) & Amorphous Bone Carbon Black (PBk9) Lightfastness: 2 • Semi-Transparent

Utrecht Green, A Chlorinated Copper Phthalocyanine (PG7) and Hansa Yellow 4GX (PY 73) Lightfastness: 1 • Transparent

Utrecht Green, O Chlorinated Copper Phthalocyanine (PG7) and Hansa Arylide Yellow 4GX (PY 73) and Zinc Oxide (PW4) Lightfastness: 1 • Transparent

Viridian, O, W Hydrous Chromium Sesquioxide [PG 18] Lightfastness 1 • Opaque Litanium Dioxide [PW 6] and precipitated calcium carbonate, Lightfastness:1 • Opaque

Titanium Dioxide [PW 6] and precipitated calcium carbonate, Lightfastness:1 • Opaque

Utrecht Oil Priming White, O Titanium Dioxide [PW 6] and Zinc Oxide (PW 4) and Barium Sulfate Lightfastness:1 • Opaque

Zinc White, O Zinc Oxide (PW4), Lightfastness: 1 - Opaque



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THE GUIDE TO UTRECHT PROFESSIONAL ARTISTS' MATERIALS

One of the practical properties' of acrylic colors is it's rapid drying. An underpainting can be built up quickly. The rapid drying of acrylic colors allows the artist to apply multiple layers in quick succession. You can get very subtle effects in gradations of color and form by overpainting one layer of transparent color over another.

The general rule in applying Utrecht Acrylic Mediums which are transparent or semi-opaque is to brush on carefully without introducing air bubbles into the acrylic paint layers. Utrecht Acrylic Colors can be used in a wide range from watercolor techniques to heavy impasto painting.

UTRECHT GLOSS ACRYLIC MEDIUM is the

basic vehicle in the manufacture of Utrecht Acrylic Colors. It is of a syrupy consistency which dries clear and glossy. The degree of gloss and/or transparency (for glazing) can be controlled with the addition of water or Utrecht Matte Medium.

UTRECHT GLOSS ACRYLIC GEL MEDIUM

has a heavy body that can produce very unique painting and glazing techniques. Mixing more color with the acrylic gel you can produce a thicker less transparent paint layer. In the glazing technique mix more Utrecht Acrylic Gel with the Utrecht Acrylic Colors: then you can apply multiple transparent layers of various thickness producing unique coloristic effects. Generally when glazing, you will be applying a darker transparent layers of color over a -lighter color so that the underlayer reflects light. A basic example is to tint the acrylic gel with a blue and apply thickly over a yellow layer of acrylic color. Theresult will be a visual green which will refract a greater amount of light because of the thickness of the gel compared to a thin glaze. A very thick layer of Utrecht Acrylic Gel may take overnight to dry through. As the gel dries it gets clearer and clearer and you can glaze over it with different acrylic colors and degrees of thickness of the acrylic paint layer

UTRECHT ACRYLIC GEL OPAQUE: makes it possible to apply a thick texture of opaque layers of acrylic color. The degree of opaqueness can be controlled with addition of clear acrylic medium and gel. The paint layers or glazes with addition of opaque gel can produce unique coloristic effects.

UTRECHT MATTE MEDIUM is made to be mixed with Utrecht Acrylic Colors. It diffuses the light and reduces the natural gloss of the Utrecht Acrylic Colors.

UTRECHT ACRYLIC MATTE GEL MEDIUM

produces similar results as the Utrecht Acrylic Gloss Gel Medium. However, it does not have a high gloss and is reduced in transparency. Different mixtures of Utrecht Matte Gel and Gloss Gel can produce different degrees of gloss transparency and matteness.

UTRECHT ACRYLIC IRIDESCENT TINTING MEDIUM mixed with Utrecht Acrylic Colors produces a dried paint layer with a more reflective and iridescent quality. Mix a little at a time until the desired result is achieved. The reflective and iridescent effect is greater with transparent colors than with opaque colors. It should be applied very carefully. Do not use rapid brushstrokes since air bubbles can be introduced into a water-based paint very easily this way. The air bubbles would produce somewhat of a matte-like finish. You should always test the varnish on a little sample piece to make sure it is the degree of gloss that you want.

THE MANUFACTURE AND TESTING OF SUPERIOR PROFESSIONAL UTRECHT OIL AND ACRYLIC COLORS

Utrecht's four indispensible conditions that govern the production of our superior permanent artist's colors:

(1.) Determined and uncompromised effort to produce superior professional artist's colors regardless of cost.

(2.) Finest ingredients and formulation: -Proper maximum of 100% pure,

permanent and brilliant pigments. -Proper minimum of 100% pure and

permanent vehicles.

-100% free of all adulterants and fillers.
(3.) Expert knowledge and experience in formulation, manufacturing and testing.
(4.) Utrecht meets all known Health & Safety Standards of Art & Craft Institute.

Utrecht manufactures artists' colors with strict

adherence to the highest artistic colors with strict standards. Utrecht maintains quality control over every aspect of production, from the initial stages of formulation to the final automatic filling of tubes, jars and cans.

FINEST TESTED INGREDIENTS

Utrecht carefully selects and uses only the finest quality, full strength pigments and vehicles regardless of cost. This is a primary requirement in the production of Utrecht's highest professional quality permanent artists' oil and acrylic colors.

PERMANENCY: The choice of pigments for Utrecht Oil Colors and Utrecht Acrylic Colors have been carefully tested and are universally recognized as permanent by artists and color experts. See next page for a complete listing of the pigment composition and lightfastness classification.

PURITY: Each pigment and vehicle must be free of impurities, adulterants and fillers.

BRILLIANCE: Each pigment used must be as brilliant and clean in color tone as it can possibly be.

STRENGTH: Each pigment used must behigh in color and tinting strength.

ADHESIVENESS AND PERMANENCY OF THE VEHICLE: An important requirement both Utrecht Oil and Utrecht Acrylic Colors is that the vehicles must be stable, permanent and with superior adhesive properties.

UTRECHT PROFESSIONAL ARTISTS' ACRYLIC COLORS Supreme Professional Quality

which produces brilliant and concentrated colors with excellent working properties.

UTRECHT WHITE is a special non-yellowing oil painting white manufactured by Utrecht, carefully ground in safflower oil whose outstanding feature is that it is non-yellowing. It also produces a flexible and durable paint film. Safflower oil is a thoroughly tested and generally accepted vehicle for artists' oil colors. Utrecht White is safely intermixable with all the different Utrecht Oil Colors which are also intermixable with each other because of linseed oil's chemical similarity to safflower oil.

UTRECHT'S PROPER PROFESSIONAL FORMULATION AND QUALITY -Proper Maximum Pigment -Proper Minimum Vehicle -No Adulterants or Fillers Used

Artists' colors are essentially manufactured by mixing and grinding pigments and vehicle. Pigment particles are insoluble; they are actually dispersed and suspended in the vehicle. Each pigment requires a different proper minimum percent of vehicle to produce a concentrated and workable "paste."

UTRECHT PROFESSIONAL FORMULA

The proper maximum of the highest grade 100% pure pigment and minimum of vehicle is an indispensable requirement of the Utrecht Supreme Professional Quality Colors. As represented by the diagram Formula A. Utrecht's proper formulations contribute to the high color (or tinting) strength, brilliance, proper drying time, working qualities, consistency, permanence and durable paint film.

UTRECHT'S PROPER FORMULATION AND PAINT FILM

Utrecht's properly formulated and manufactured professional artists' colors, the vehicle permanently binds or adheres the pigment particles together. It also contributes to the adhesion of the different paint layers and to the canvas support through the centuries. For example, less vehicle than the proper percentage may produce an impermanent paint film, which will become brittle and disintegrate with age. The improper excess of vehicle produces a color with undesirable properties, such as weakening its color strength and affecting its permanency.

PIGMENT PERCENTAGE AND MANUFACTURING COSTS

In terms of dollars and cents the pigment is generally the most expensive ingredient in the formulation. UTRECHT FORMULA [A] is of excellent professional quality and has great money value. Utrecht's Professional Artists' Colors have a high percentage of pigment and therefore high manufacturing cost.

Buying direct from Utrecht one of America's major manufacturers of artists colors makes it possible for the artist to purchase supreme professional quality at low prices. FORMULAS B and C are lower in cost to manufacture. Formula B represents a good quality, but has less pigment in the formulation than Formula A. Formula C is of poor quality that is called a "student grade" color. The pigment percent can be reduced with substitutions of inexpensive fillers or adulterants; also with excessive vehicle, whose presence can be improperly masked with the solidifying action of stabilizing agents. Use of substandard ingredients can also reduce costs.

UTRECHT MODELING PASTE AND

EXTENDER is a flexible material. It is made from precipitated calcium (sometimes called marble dust), pure titanium and acrylic polymer emulsion. It can be built up to thick impastos without cracking or flaking. One can tint Modeling Paste and Extender with colors and build up an underpainting which will be less expensive than with pure acrylic colors.

VARNISHING THE ACRYLIC PAINTING

The physical character of an acrylic painting has a toughness that makes varnishing it an option. If you want to produce an even gloss varnish for a certain look we suggest the following procedure: Utrecht Gloss Acrylic Medium is the basic varnish for acrylic painting. Utrecht is one of the first developers and manufacturers of professional artists permanent acrylic colors in the world. Utrecht introduced the line in 1957 after years of research and testing. This contributed to the greatest innovation in the history ofartists colors in 500 years; i.e. since the invention of oil colors. All the different Utrecht Acrylic Colors and Gesso Colors are safely inter-mixable.

Utrecht Artists Acrylic Colors are carefully mixed and ground with Acrylic Polymer emulsion producing brilliant concentrated colors which dry to a tough permanent paint film.

UTRECHT PROFESSIONAL ARTISTS OIL COLORS

Supreme Professional Quality Utrecht Professional Oil Colors are carefully ground in the highest quality alkali refined Linseed Oil and/or Safflower oil of neutral natural acid;

MEASURING THE PERCENT OF PIGMENT IN A PAINT FORMULA

The amount of pigment in a formulation of an artist color can be discovered. This is done by mixing a measured amount of the color to be tested with a measured amount of white paint.

Simply, the more high grade pigment in the formulation, the stronger it will tint the white. Utrecht uses a reflectometer to measure scientifically the tint strength of every oil and acrylic color formulation and comparing the reading to a high standard established by Utrecht Manufacturing Corp. This is to assure the artist that he is receiving the proper maximum of pigment and therefore, colors of high tint strength. We will explain how you can test Utrecht Colors for yourself in the next section.

Each color must be manufactured according to its individual physical and chemical characteristics. Each pigment is different and has various characteristics, for example, the particular hardness, size and shape of the pigment particle; also its specific gravity, vehicle absorption properties.

The pigment and vehicles of Utrecht Oil and Utrecht Acrylic Colors are carefully mixed and ground on the three roller mill several times until each color has achieved its optimum brilliance and intensity, and the proper maximum of pigment and minimum of the vehicle has been completely dispersed.

UTRECHT'S PROPER CONSISTENCY:

An important quality test is to measure the paint consistency for proper response to the artist's brush and/or palette knife work. A two millimeter volume of paint is accurately measured and placed in the center of a glass plate; another plate is placed over it, on top of which is rested a two-kilogram weight (over four pounds). The paint should not spread beyond a determined fixed point.

YOU CAN TEST UTRECHT PROFESSIONAL OIL AND ACRYLIC COLORS AGAINST ANY BRAND.

Discover For Yourself The High Professional Quality of UTRECHT ARTISTS' COLORS

Since 1961, Utrecht has distributed millions of copies of instructions on how to test and compare Utrecht Oil and Acrylics with any other brand regardless of cost, domestic or imported.

FOUR IMPORTANT TESTS FOR QUALITY YOU CAN EASILY PERFORM

Utrecht has consistently recommended over the years that artists test and immediately discover for themselves the superior professional quality of Utrecht Professional Oil Colors and Utrecht Professional Acrylic Colors.

This is a very clear demonstration of the great confidence we at Utrecht have in the high professional quality of the artists colors we manufacture. We will outline some significant but simple tests you can easily-perform. These tests are accepted by artists and experts as useful aids in judging the quality of permanent artists colors. An important part of this procedure is to make comparative tests with any other brand regardless of their selling price.

(1.) MASS TONE: Mass tone is the color quality of the paint as it comes out of the tube or jar. Spread the paint out smoothly with a with a palette knife and visually examine it for the If the paint is too fluid it will limit the range of painterly effects. If the paint is too sticky or tacky, it may be difficult to brush it out. An artists' paint of the proper consistency can be applied from the smoothest paint layer to the thickest impasto in a controlled manner.

(4.) COLOR STRENGTH TEST: We suggest you make a color or tint strength comparison of Utrecht Professional Acrylic Colors and Utrecht Professional Oil Colors against any other brand imported or domestic regardless of it's selling price. The consistency of an artists paint is no certain clue to its color strength. This can only be determined by tinting it with white. For example, the excessive vehicle in the student grade color can be stiffened with improper use of stabilizers to mask the smaller amount of pigment in its formulation. Pigment shortage in an artists' color can be easily discovered with the simple color strength test.

a) Begin by noting the color name or color index name and the pigment composition printed on the label of the color to be tested. For example, Cadmium Yellow Pale should not be compared with Cadmium Yellow Deep or Hansa Yellow. Only colors of the same color name and pigment composition should be compared.

b) Carefully measure out one level teaspoon of the color to be tested and three level tablespoons of white. Use the same tube of white throughout the test. Make sure that there are no air pockets in the paint caused by careless placement in the spoon.

c) Thoroughly mix the color and white with astiff palette knife until all streaking has disappeared.

d) First spread smoothly with a palette knife the tinted mixtures of Utrecht Oil or Acrylic color on half of a piece of canvas or paper. Next spread the other brand tinted color next to it. The brand which is stronger or richer in color has the greater amount of pigment in the formula and is of higher quality. The batch which has the paler tint has a smaller percentage of pigment in the formula and is of poorer quality.

It is important to remember that tint strength of different colors (and different pigment composition) are not necessarily equal. There can be variations. For example: a high grade Phthalocyanine Blue has a stronger tint strength man a high grade Pure Cobalt Blue. What is significant is the comparative tint strengths of two or more brands of same color name and pigment composition.

SINCE 1949, UTRECHT HAS PLAYED A SIGNIFICANT ROLE IN THE REVIVAL OF ARTISTS PREPARING THEIR OWN CANVAS

Today it is a completely accepted practice for artists to prepare their own canvas. Since 1949, Utrecht has been a significant force in bringing this about throughout the whole contemporary art world. It seems hard to believe today, but for many years before 1949, only a small percentage of artists prepared their own canvas. There were two major reasons for this. (a) The simple procedure for preparing canvas was not generally familiar, (b) Also, there was not a complete line of unprimed canvas easily available for the professional artist. single step canvas preparation could be developed.

In 1957, after years of careful research and testing, Utrecht manufactured and introduced professional Utrecht Acrylic Gesso and Utrecht Acrylic Colors. The introduction of Utrecht Acrylic Gesso contributed to the great innovation in canvas preparation. Utrecht is one of the first major manufacturers of Professional Acrylic Gesso and Acrylic Colors in the world. It provided artists with a very simple single step method of preparing their own canvas, for acrylic or oil painting. This contributed significantly to the acceleration of the practice of Artists everywhere preparing their own canvas. Utrecht Acrylic Gesso has become one of the most widely used priming today.

UTRECHT ARTISTS CANVAS

The general function of the linen and cotton canvas support is to provide a foundation upon which painting is permanently adhered to. Linen and Cotton canvas are the two basic supports which artists generally use for oil and acrylic painting today. Each has its own special properties and characteristics. The proper choice of the canvas support and texture depends on the artists painting requirements.

TEXTURE AND WEIGHT OF CANVAS

The texture of the canvas provides a mechanical grip for the paint layers to adhere to it. Therefore, the rougher the texture and heavier the weight of the canvas provides greater adhesion for heavier applied paint layers.

CROSSBRACING THE UTRECHT EXTRA HEAVY DUTY STRETCHERS

The cross bracing of larger works reduces the possibility of the 'twisting' of Utrecht professional extra-heavy 1 I/4"x 2 ¼" stretchers. This twisting can be produced by the tension created by the stretching procedure. Tension can also be produced by the greater shrinkage of the linen than cotton canvas during the drying of the glue sizing. However, the stretching of primed canvas results in less tensions and twisting of the stretchers.

Cross Bracing Utrecht's Extra-Heavy Duty Stretchers:

Utrecht Professional Extra Heavy Crossbraces are 3/4"x2 1/4" and have four rounded edges to minimize producing an impression on the canvas. They come in four basic sizes: 36", 46", 56" and 68" which can be easily cut to the required length. A canvas that may need crossbracing is when the longer side exceeds approximately 44" regardless of the length of the shorter side. When the length of the long side exceeds 60" you may use two or three crossbraces across the shorter distance. In order to saw the crossbraces to size one can use a mitre box or a carpenter square to indicate with a pencil line precisely where to saw. This is to make sure the end of the crossbrace fits flush with the stretcher. Place the crossbrace strip of wood cut to the required length to fit snugly between the shorter distance between the inside space of the stretchers. One can easily connect the cross brace to the back of the stretcher strips with steel mending plates with screws (with or without the use of Elmer's

intensity, brilliance and cleanness of color quality.

(2.) UNDERTONE: The undertone of a color can be revealed in two ways: Tinting the color with white or scraping the paint with a stiff palette knife very thinly over the surface of white paper. The whiteness of the surface should be partly visible through the paint. Examine the undertone also for it's brilliance, intensity and cleanness of color quality. The color of the undertone can appear somewhat different than the mass tone. The importance of the mass and undertone of a paint is obvious- that is one of the color qualities with which the artist will express himself.

(3.) WORKING QUALITY: The consistency of the paint as it comes out of the tube or jar should be tested for its working qualities. Use a brush, knife or even your fingertips. Oil colors have a different feel or texture from acrylic color. In 1949 Utrecht began a program publishing instruction booklets and articles on the simple procedure of preparing canvas in the Utrecht catalog which millions of copies were distributed over the years throughout the USA. In 1949 Utrecht also began developing a range of unique textures and weights of properly woven unprimed canvases. The Utrecht superior professional line of unprimed canvas provided many artists with a strong incentive to begin preparing his own canvas.

For about 500 years before 1957 the two step procedure of glue sizing and applying oil priming white on the canvas for oil painting was the only generally accepted method and materials to be used. In the early 1950's Utrecht believed that a glue.) When placing a cross brace across two parallel sides one can still key out the other two sides to further tighten the canvas, if needed.

THE STRETCHING OF THE CANVAS

There are several equally good ways to stretch primed or unprimed canvas. We will suggest one method which has been successfully used for many years. The unprimed linen and cotton canvases have a degree of natural elasticity which allows for easier handling and stretching than pre-primed linen or canvas. It is important to handle and stretch already prepared canvas carefully to avoid producing creases. You can use either a Staple Gun using 5/16" staples or a Hammer using 1/2" carpet tacks. A magnetic tack hammer can speed the process of nailing and stretching your canvas. It will be helpful if before beginning the stretching procedure, mark the center of each side of the stretcher and canvas with charcoal. This will help you to line up the canvas with the middle of the stretchers.

It is recommended to have the front of the canvas facing away from you and with the back of the canvas facing you. This will enable you to stretch the canvas more tightly toward you.

Attaching Side One: Center the canvas on the stretchers so that it will overlap at least three inches on all the sides equally. Begin attaching the canvas to the stretchers with a staple gun or hammer in the center of the shorter side (corresponding with position A on the diagram). Next pull the canvas tightly toward the corner of the same short side and fasten the canvas with a tack or staple about three inches from the end of the stretcher strip. (Position B) This is to allow room to fold the canvas in the corners and nail in, which is done after all four sides are attached. Repeat this on the opposite corner of the same side. (Position C) Now the first side of the canvas has now been fastened with only three tacks or staples.

Attaching Side Two: Turn the canvas completely around with the opposite untacked shorter side on top. Pull tightly from the center and away from the opposite shorter side fasten the tack or staple in the center of the strip at Position D. Then, tack or staple one corner (Positions E) pulling tightly in a direction away from the center of the stretcher and at the same time away from the opposite side. The tack or staple in Position E should be about 3 inches away from the end of the stretchers. Now repeat the procedure for fastening the opposite corner 3" away from the end (Position F).

Finishing Attaching Sides One and Two: The canvas is now stretched tautly with only six tacks or staples. Begin stretching and nailing the tacks or staples no more than two inches apart, starting out from the center of the short sides stretching the canvas toward you. Leave all the corners unlocked until the final step of the stretching procedure.

Attaching Sides Three and Four: Repeat the above stretching procedure used on sides one and two on the longer sides.

The Canvas Corners: After you have stretched all four sides the corners can be done. Neatly fold and tuck in the canvas under at the corners and place the tacks or staples in the wider part of the stretcher joint which is either at the top or bottom of the edge at alternate ends of the stretcher strips. Note: Large size canvases: One can place two tacks or staples about an inch apart at each of the six positions A-F.

THE PREPARATION OF THE CANVAS

The basic requirements of the primed canvas is to provide a foundation for the paint layers to permanently adhere to it. Utrecht Acrylic Gessos and Utrecht Oil Priming White are the two major tested canvas priming materials Utrecht manufactures. We will describe the method of canvas

preparation with these priming materials.

UTRECHT ACRYLIC GESSOS For Oil or Acrylic Painting

Utrecht Acrylic Gesso is used as a priming for both oil and acrylic painting. It has eliminated the need for the traditional glue sizing the canvas. Utrecht Acrylic Gessos' are a indispensable for canvas priming; these standards guide their formulation and manufacture.

Utrecht Acrylic Gessos will retain their whiteness and flexibility indefinitely. The high adhesive strength Pure Polymer Emulsion produces a priming that becomes one with the canvas. It thins with water, dries water-resistant and is oil proof.

Utrecht Acrylic Gessos and Acrylic Colors Adhere to a Wide Range of Surfaces. The acrylic emulsion of Utrecht Acrylic Gessos have a high adhesive strength that can be applied and adhere to almost any clean surface that is not greasy or oily, such as linen, cotton, paper, cardboard, wood, Masonite, plywood, masonry and stone. Before gessoing Masonite the surface should be sanded.

Priming Must Dry Under Normal Conditions. Never use artificial heat to accelerate the drying of either Utrecht Acrylic Gesso, the glue sizing or Utrecht oil priming white. Let it dry under normal room temperature conditions.

THE UTRECHT GESSO PREPARATION

It is recommended to gesso unprimed canvas after it has been already mounted on the stretchers. Utrecht Acrylic Gesso can be applied with a wide 3" Utrecht Gesso brush. No preliminary sizing or sealing is technically necessary.

The significant ingredient of Utrecht Acrylic Gessos is the acrylic polymer emulsion. This contributes to the sealing of the canvas fibers, (replacing the need for the traditional rabbit skin glue sizing) protecting it from any harmful absorption of oil from the oil paint layers. Artists find it is more efficient to prepare several canvases at one time.

FIRST PRIMING:

First thin Utrecht Acrylic Gesso with up to 1/3 water before the first priming so that the Gesso can flow more easily into the fibers of the canvas. This is important in order to have the priming permanently anchor itself into the linen and cotton fibers. Begin by moistening the brush with water. Work the brush back and forth in one direction and then in a cross direction with a little pressure so the Gesso can better penetrate the fibers of the canvas. Do one area at a time.

Priming The Sides: Apply Utrecht Acrylic Gesso on the sides of the canvas where it has been tacked or stapled onto the stretchers. This will eliminate any unraveling of the edges of the unprimed canvas. Also to protect the canvas from any accidental contact with oil paint.

Smoothing The First Priming: After the first priming of Utrecht Acrylic Gesso has dried, the canvas may have a little roughness, caused by the fuzz of the fabric. This can be easily eliminated by rubbing a very fine grain sandpaper very gently over the whole surface of the canvas. When sanding over the rim of the stretchers place your finger tips underneath and gently raise the canvas away from the rim. This is to avoid producing an impression of the stretcher rim on the surface of the canvas.

UTRECHT OIL PRIMING

For Oil Painting Only The oil priming method involves two simple steps,

(a) First to double size the canvas with Utrecht rabbit skin glue solution, followed by
(b) an application of Utrecht White Oil Priming. The priming must be allowed to dry at least ten to fourteen days before it can be painted on. Some Artists who oil prime a large number of canvases at one time divide the work over a three day period.
(a). On the first day apply the first sizing on all stretched unprimed canvas
(b). On the second day sand the dried first sizing and apply the second sizing
(c). On the third day begin the priming procedure

THE SIZING OF THE UNPRIMED CANVAS:

Sizing is a solution made by dissolving Utrecht Professional high strength Rabbit Skin Glue in hot water. Its purpose is to penetrate and protect the fibers of the canvas from any harmful absorption and action of the oil from the priming and oil paint layers which can lead to a slow disintegration of the canvas fibers over time.

GLUE SIZING RECIPE:

6 Level Tablespoons of Utrecht Rabbit Skin Glue 1 Quart of Hot Water

This time tested recipe for making the sizing solution with Utrecht High Grade Rabbit Skin Glue preserves both it's inherent high adhesive strength and flexibility.

Utrecht Rabbit Skin Glue comes in a fine granulated form that can easily be measured and dissolved without any preliminary soaking. Make only enough rabbit skin glue sizing for several hours use; after that, if needed, make a fresh batch. Glue sizing solution will gradually cool over a period of several hours and begin to jell. Never re-heat the jelled sizing solution to liquefy it . This will decrease its adhesive properties. Some artists use a double-boiler so when the glue sizing solution is made it is placed over the bottom pot which is filled with very hot water which has just been removed from the-stove. This will safely delay the jelling action of the glue solution. The granulated form Utrecht Rabbit Skin Glue can be stored indefinitely in a dry place.

PREPARATION OF SIZING SOLUTION:

Bring the quart of water to a boil, remove from the burner before adding the glue. Begin by adding the six level tablespoons little by little to the quart of hot water and keep stirring until it is completely dissolved. Never boil a glue sizing solution over a burner. It will decrease its adhesive strength.

An alternative method of preparing the glue size is to first gradually stir in the six level tablespoons of rabbit skin glue in a pint of hot water. After which add the second pint of hot water to make it a quart and stir the solution. This method has been found by some to be a quicker way to dissolve the glue compared to dissolving it directly into a quart of water. A quart of sizing solution can cover approximately five square yards, depending on the texture. If one quart is not sufficient for the canvas to be sized, you can make more. Rougher textures have more surface and, therefore, require a greater quantity of glue sizing solution. The second sizing will use a bit less sizing since the absorbency of the linen or cotton has been greatly reduced.

completely formulated painting ground ready to apply to the unprimed canvas. It will dry in a matter of hours and be ready to paint on.

Utrecht Manufacturers Professional Acrylic Gesso and Artists Acrylic Gesso.

They both are formulated and manufactured to fulfill the strict requirements of canvas preparation. Both Utrecht Acrylic Gessos are composed of pure titanium dioxide [PW6] with carbonate of calcium and ground in pure acrylic polymer emulsion. Titanium dioxide is the most brilliant white available. The particle size of carbonate of calcium is microscopically larger than titanium dioxide. This produces a priming surface with a slight tooth which many artists prefer for the way it responds to brush work. Utrecht Professional Acrylic Gesso has a greater percentage of titanium dioxide in its formulation than Utrecht Artists Gesso. Both Utrecht Acrylic Gessos' have great whiteness and covering power, which is

Second Gesso Priming: The second priming of Utrecht Acrylic Gesso does not need to be thinned with water. Apply it as the first. Do not sand the second priming in order to preserve its protection of the canvas fibers.

TONE GROUNDS: Over the centuries, artists have painted on either a white or a tone ground. A tone ground can be made by tinting Utrecht Acrylic Gesso with any Utrecht Acrylic Color or Gesso Color. One can also apply the tinted Gesso to the sides of the stretched canvas. Note: Acrylic colors can be applied directly to unprimed canvas because of the high adhesive strength of the acrylic emulsion vehicle.

-Clean your hands thoroughly with soap and warm water after priming.

APPLYING THE GLUE SIZING:

Cover the entire canvas with the glue sizing with a 3 inch wide housepainters type brush. To avoid

missing any areas it is best to concentrate on one area at a time. The brush should be worked back and forth in one direction and then another. Apply with a little pressure so the sizing will penetrate and anchor itself into the fibers of the canvas. Some artists also run their bare fingers (or wearing rubber cloves) over the wet size area to make sure no spots are missed. This will also help the sizing penetrate into the fibers of the canvas.

Glue Sizing the Sides: Glue size the sides of the canvas where it is nailed or stapled to the stretchers to prevent the edges of the fabric from unraveling. This will also protect the canvas from any direct contact with any oil paint during the process of priming and painting.

Smoothing the First Dry Sized Surface: After several hours, or the next day, the sized canvas may dry with a little roughness produced by the fuzz of the canvas. This is easily remedied by very gently rubbing a very fine grain sandpaper over the whole surface. When sanding over the rim of the stretchers gently raise the canvas up from the back of the stretchers with your fingertips to avoid producing any impression of the stretcher rim on the surface of the canvas.

SECOND SIZING: The second sizing should be applied in a similar way as the first. The second sizing, however, should never be sanded. This is to prevent any possible removal of the any of protective sizing. The second sizing will be applied over a shorter period of time since it attaches itself to the first sizing without penetrating the fibers itself, which the first sizing has done already. Do not store the sizing solution. Dispose of any remaining amount at the end of the sizing procedure and clean all utensils with hot water and brushes with warm water.

-Always clean your hands thoroughly with soap and warm water after sizing.

OIL PRIMING WHITE

Utrecht Oil Priming White is composed of Titanium Dioxide [PW6], Zinc Oxide [PW4] and barium sulfate ground in the proper low percentage of the finest quality linseed oil. The result is a very lean priming white. Fulfilling the indispensable requirements for a permanent oil painting ground. Utrecht Oil Priming White can also be used in the underpainting or painting in general.

THE CLASSIC RULE OF PAINTING FAT OVER LEAN

This fundamental rule of oil painting, fat over lean, is concerned with the permanent adhesion of the different oil paint layers in the painting. A lean paint layer containing less oil is therefore more absorbent than a fatter paint layer with a greater percentage of oil. The lean laver has the ability to absorb some of the oil from the fat or even lean paint layer on top of it. This absorption produces adhesion of the paint layers by anchoring the top oil paint layers into the bottom lower leaner layers. Therefore, one can apply either a lean or fat oil paint layer over a dry absorbent lean oil paint layer. This produces a permanent adhesion between the paint layers. However, a fat, non-absorbent dried oil paint layer cannot be painted over because neither a lean or fat paint layer will permanently adhere to it. However, the final paint layer can be either lean or fat. Generally speaking, the three simple ways to oil paint follow the rule of painting over a dry lean paint layer. (a) Use a lean oil painting medium sparingly (b) In the underpainting, mix colors with a little of any Utrecht Oil White, all of which are lean. (c) Of course, if one wishes, the final paint layers can be fat since they will not be overpainted. However, in acrylic painting the very high adhesive strength of the acrylic polymer emulsion vehicle produces the adhesion of the different acrylic paint layers which may be applied in a random sequence. Therefore, the rule of painting fat over lean or lean over lean applies to only oil painting- it does not apply to acrylic painting.

canvas:

Never add oil to Utrecht Oil Priming White, this would make the priming fatter. Its leanness must always be preserved. Begin by mixing small amounts of gum turpentine to the Utrecht Oil Priming White with a palette knife. During the mixing some paint will accumulate on the palette knife which can be removed with the aid of another palette knife. One way to test if the workable consistency has been reached is to pick up a moderate amount of paint on the knife and shake it gently. If any paint falls from the knife it is ready to use.

PRIMING WITH A PALETTE KNIFE: Begin by

placing a portion of the thinned Utrecht Oil Priming White in the center of the sized canvas. Spread it in one direction and then in the opposite and in a diagonal direction. This will allow you to work it into the texture of the canvas easily and completely. Concentrate, as always, on one area at a time.

Priming The Edges: Place a small portion of

two or three inches from the edge of the canvas and then spread the priming towards the edge. To avoid the formation of a ridge by the stretcher, raise the canvas gently from underneath with your fingertips.

Painting The Sides: After the canvas is primed some artists paint the sides of the canvas where it has been tacked or stapled onto the stretchers which has already been double-sized. Thin the white or tinted priming with turpentine to brushable consistency and then carefully apply with a No. 12 Utrecht bright bristle brush.

The Optional Second Priming: The second white priming can be applied the next day or any time after the priming has dried. This will somewhat reduce the texture of the canvas. A double primed canvas is not technically necessary, but is solely determined by the kind of surface the artist wishes to paint on.

To Finish: The artist may eliminate any unevenness by gliding a clean palette knife over the whole surface of the primed canvas

PRIMING WITH A BRISTLE BRUSH: Using a Utrecht large bright bristle brush size 12 - 24, apply the priming by stroking the brush in all directions with a wrist-waggly motion, working it well into the weave. After evenly distributing the priming over the whole surface, finish by going over lightly with a clean brush carefully in line with the weave.

TONE GROUNDS: Tone grounds may be directly applied on the sized canvas or over the first white priming. A small amount of any oil color or mixture needs to be added to tint the Utrecht Oil Priming White. There is an advantage of mixing quick drying oil colors such as burnt or raw umber to speed up the drying of the colored tone ground. A tone ground is thinned and applied in the same manner as the white priming.

-After priming is complete, wash your hands thoroughly, with soap and warm water

DRYING TIME: The oil priming should dry 10-14

and damar varnish five pound cut and gum turpentine.

(1.) **PURE GUM TURPENTINE.** Gum Turpentine is a common thinner or dilutant for oil paints and varnishes. It is a most valuable diluting agent since it evaporates quickly without leaving any residue. Avoid excessive use of pure gum turpentine, by itself it can weaken the bond between pigment particles and the linseed oil binder in oil paint. Turpentine is, of course, absolutely lean.

(2) UTRECHT DAMAR CRYSTALS are derived from trees growing in the Malay states and in the East Indies. Damar is bright, clear, transparent and ranges in color from water white to deep straw. The best grade available is Utrecht Singapore Damar Crystal, No.1. It is soluble in gum turpentine. Damar has stood the test of time and retains it's colorless appearance. It provides an excellent protection from the atmospheric gases and dampness and is not subject to oxidation. Damar gives great depth to colors as well as clarity. As part of the painting medium it contributes to a gloss effect which can be decreased by the addition of more turpentine. It also renders a certain tackiness to the painting medium which contributes a degree of control of brushwork.

Making Damar Varnish 5 Lb Cut:

Damar Varnish five pound cut is the basic ingredient in making oil painting mediums and varnishes is made from a recipe based on a ratio of **five pounds of damar crystals dissolved in one gallon of gum turpentine**. This ratio is a derivation of the term five pound cut.

UTRECHT READY-TO-MAKE DAMAR VARNISH UNIT:

Utrecht, in 1962, developed and introduced Ready-to-Make Damar Varnish units. This, for the first time, greatly simplified the preparation of Damar Varnish five pound cut by supplying a quart container with 10 1/2 ounces of Singapore Damar Crystals #1 in a mesh bag. All that is necessary is to pour one pint of gum turpentine into the container and then close it. Make sure the string of mesh bag hangs outside the container, held firmly in place by the lid. Occasionally shake the container to aid the dissolving of the crystals, making sure the bag is completely submerged. Within 24-36 hours it will be ready. After which, remove the bag. Utrecht has added 1/2 oz. extra of the damar crystals to allow for any undissolved remainder. Damar 5 Lb. Cut will appear slightly cloudy due to it's natural waxes which have an important protective function for the paint layers When dry the Damar Varnish film will become clear and transparent.

Making Damar 5 Lb Cut with a pound of Damar Crystals: It is very simple to make it yourself. Wrap one pound of damar crystals in a lint free lightweight cotton rag. Tie it at the top, through this you can place a rod or stick. Pour 25 ounces of gum turpentine in a wide mouth quart jar. Then lower the bag into the container- submerging it completely into the turpentine. Place the rod over the top of the container and cover. Damar 5 Lb. cut is produced after 24-36 hours. After which, remove the bag.

UTRECHT OIL PRIMING PROCEDURE:

The Utrecht Oil Priming can be applied with either a large trowel shaped knife or a large stiff bright bristle brush.

The Thinning of Utrecht Oil Priming White with lean gum turpentine to a workable consistency enabling easy application over the sized days at normal room temperature before being painted on. If you prepare several canvases at one time then you will have a stock that is dry and ready to paint on.

UTRECHT OIL AND ACRYLIC PAINTING MEDIUMS & VARNISHES

The proper use of professional painting mediums for oil or acrylic painting is an important tool that can expand the range of paint quality, textures and coloristic effects the artist can produce. It can also contribute significantly to the brilliance and permanency of the painting.

OIL PAINTING MEDIUMS

The Ingredients of the Oil Painting Medium: Professional oil painting mediums can be easily and economically made from time-tested ingredients, each one with a definite function and purpose. They are stand oil, linseed oil

(3.) UTRECHT ALKALI REFINED LINSEED OIL: Linseed oil is the universally accepted

OIL: Linseed oil is the universally accepted vehicle for

grinding Professional Artists Oil Colors. It is produced by processing the seeds of the flax plant. It is then refined by removing all the impurities. Utrecht Linseed Oil has a neutral natural acid which very important. This makes it ideal for manufacturing high quality professional oil colors with a tough and durable paint film and permanent in color. Utrecht Linseed Oil is much leaner than Utrecht Stand Oil. This leaness is an indispensible property for a vehicle in the production of Professional Artists Oil Colors. The leaness of the linseed oil is also an important consideration in the formulation of oil painting mediums. It is a drying oil that produces a workable oil paint consistency. When dry it produces a tough, durable permanent and adhesive paint film; which can be overpainted. Note: It is important to use oil

colors on the palette which have not begun to dry are still at the peak of their adhesive strength.

(4.) UTRECHT STAND OIL.

Utrecht Stand Oil is a heavy-bodied polymerized oil that is highly recommended ingredient of the oil painting medium because of its superior qualities. Utrecht Stand Oil is non-yellowing, produces paint film of exceptional durability, flexibility and tough nature which resists the action of solvents. Utrecht Stand Oil is much fatter than linseed oil and is a slower drier. Stand oil by itself is very fat. The drying time can be shortened with addition of gum turpentine in the oil painting medium, as well as reducing it's fatness. Utrecht Stand Oil is made from linseed oil that has been heated to over 500° in a vacuum. During the heating the molecules of linseed oil unite to form larger molecules and this thickens the stand oil. These new molecules are highly resistant to yellowing, cracking and disintegration. Pure Stand Oil added to oil color will give a fluid quality to the paint which has a tendency to dry to a smooth paint film free of brush marks. The addition of various amounts of damar varnish or gum turpentine can modify the degree of accent of brush marks and also speeds drying time.

BASIC RECIPES FOR PROFESSIONAL OIL PAINTING MEDIUMS

The basic recipes for professional oil painting mediums are listed below. The leaner oil painting mediums are designed for general painting. This will contribute to maintaining the leaness and the permanent adhesion of the different paint layers in the work. The fatter oil painting mediums are only designed for final paint layers and for alla prima painting; (i.e. painting wet oil paint into wet oil paint.) It is very easy and economical to make one's own painting mediums and varnishes. Also most important is that the artist can custom make them by varying the proportions of the time tested ingredients to meet individual artistic requirements. An important property of degree of leaness or fatness of the oil painting medium can be easily controlled:

(a) by controlling the ratio of stand oil to gum turpentine. For example, as we increase the percentage of stand oil this will increase the degree of fatness. Conversely, increasing the percentage of gum turpentine will increase the leaness.

(b) By introducing the leaner Utrecht Linseed Oil the artist can reduce the fatness of the stand oil. Using this approach one can modify the wide range of recipes which we have listed below

SUGGESTED BASIC RECIPES:

Leanest Basic Painting Medium: 1 Part: Utrecht Linseed Oil 5 Parts: Gum Turpentine

Leaner Basic Painting Medium: 1/2 Part: Utrecht Linseed Oil 1/2 Part: Utrecht Stand Oil 5 Parts: Gum Turpentine

Lean Basic Painting Medium: 1 Part: Utrecht Stand Oil lean over lean will determine the use of oil painting medium described earlier The final oil paint layers or in alia prima painting (painting wet paint layers into wet)', a fatter painting medium can be used, such as the stand oildamar concentrates (which are fat and very fat). Very little is needed to accomplish it's basic purpose. One way of using it is to dip the tip of a palette knife in a mixture of stand oil-damar concentrate and mix it with only two inches of paint as it comes out of the tube. This will increase its brilliance and add roughness and durability to it. We wish to note that only a few artists use the fat or very fat oil painting mediums. A fat final paint layer to becomes glossy and "non-porous", which protects it against the absorption of atmospheric dirt. However it can not be overpainted because of it's excessive fat and non-porous paint layer. Of course, in alla prima painting the artist can use any of the oil painting mediums listed above.

UTRECHT FLEX GEL

Ingredients: Clear colloidal transparentizer ground in non- yellowing safflower oil. The nonyellowing property is especially important for thicker applications of oil paint. FLEX-GEL is an Oil Painting and Glazing Medium manufactured by Utrecht of a similar buttery consistency as Oil Paint. This important factor opens up a whole new range of painterly effects unattainable by fluid painting and glazing mediums. FLEX-GEL increases the artists flexibility in oil paint textures.

• FLEX-GEL can render the thinnest to heaviest impasto layers of opaque oil color transparent. It can be applied by brush or painting knife. This can be done while retaining the oil colors' buttery consistency and without making the paint fluid.

• Very little FLEX-GEL should be used with oil colors to accomplish its purpose.

VARNISHING THE OIL PAINTING

The purpose of the final coating of picture varnish is to give (he painting an even gloss and contribute to the protection of the painting from absorption of atmospheric dirt and moisture.

VARNISHING AN OIL PAINTING.

There are two basic varnishes for oil painting.

Retouching Varnish: 5 Parts: Damar Varnish 5 Lb. Cut 13 Parts: Gum Turpentine

Final Damar Picture Varnish: 4 Parts: Damar 5 Lb. Cut 1 Part: Gum Turpentine up to 5% stand oil can be added.

There is a recommended procedure in varnishing a picture. Retouching Varnish is considered a temporary varnish and it isapplied when the surface of the painting is dry to the touch. Final Picture Varnish is applied only when the painting is thoroughly dry. A painting with a moderate impasto or thinly applied paint layers can receive a final picture varnish anytime after six months of drying. A painting with heavy impasto should dry between one and two years after completion of the painting. Varnish a picture on a day with low humidity and a painted surface free from moisture. Make sure that the large bristle brush you use is free of moisture. Also, clean the surface of the painting with a soft, lint-free cloth. Lay the painting in a flat or upright position on your easel and apply the varnish methodically one area at a time to make sure every part is covered. Work in a correct angle to the light so you can see the areas which have hot been touched. After a few days dry spots may appear, this is caused by greater absorbency in certain areas. Simply rub a small amount of Utrecht Linseed Oil in that area to restore the normal shine and carefully wipe off any excess.

comes out of the tube is called short paint. It has a stiff buttery quality which retains it's brush marks easily; and when stippled with a palette knife creates many short crisp peaks of paint, from which the term is derived. Short paint produces a paint quality not easily obtained by any other means.

LONG OIL PAINT : Short paint can be made long with a mixture of a little stand oil or painting medium, with stand oil in it. You will notice far fewer pointed peaks of paint after stippling with a palette knife. The peaks level off gently. Long paint tends to leave no brushmarks. It can produce a fluid b

With the controlled use of oil painting mediums the artist can produce a whole range from short to long paint. This contributes significantly to the artists ability to express himself in terms of a great variety of paint quality.

THE GLAZING TECHNIQUE

The classic glazing technique is an important and special means to mix colors. The glazing technique which has been used by artists for over five centuries is essentially the application of a thin transparent veil of a darker color which has been mixed with all-purpose lean painting and glazing medium over another dry lighter oil color to produce brilliant coloristic effects. A parallel can be made by placing a blue color cellophane over a yellow color with green as the result. The glazing technique is used/or both oil and acrylic painting.

UTRECHT PROFESSIONAL ACRYLIC COLORS. MEDIUMS AND VARNISHES

Acrylics have proven to be today's most versatile artist's colors, varnishes and mediums. Utrecht Acrylic mediums provide an entirely different approach and can produce very unique painterly effects which are different from the oil painting technique. Two or more Utrecht Acrylic Mediums can be mixed together to expand the range of effects

The high adhesive strength and fast drying of Acrylic Polymer Emulsion Vehicle is the fundamental property of the unique technique of acrylic painting.

THINNING OF UTRECHT ACRYLIC COLORS:

Utrecht Acrylic Colors, Gesso Colors, Acrylic Mediums and Varnishes thin with water and dries water-resistant. Excessive thinning with water is never recommended because it may reduce the adhesion between the acrylic polymer emulsion and the pigment particles. However, when producing thin, transparent washes of acrylic colors it is recommended to thin with a mixture of 50% water and 50% acrylic medium. The process of acrylic painting has great freedom The paint layers can be applied in any sequence governed solely by the painterly and coloristic effects the artist wishes. You cannot mix Utrecht Acrylic Colors with Oil Paint, turpentine, damar varnish or any oil painting medium.

5 parts: Gum Turpentine

All Purpose Lean Painting and Glazing Medium: (Many Artists use this recipe from start to finish) 1 Part: Utrecht Stand Oil 1 Part: Damar Varnish 5 Lb.. Cut 5 Parts: Gum Turpentine

Fat Stand Oil -Damar Concentrate: 1 Part: Utrecht Stand Oil 1 Part: Damar Varnish 5 Lb Cut. 3 Parts: Gum Turpentine

Very Fat Stand Oil - Damar Concentrate: 2 Parts: Utrecht Stand Oil 1 Part: Damar Varnish 5 Lb Cut

SOME BASIC RULES IN USING OIL PAINTING MEDIUMS.

The time-tested rule of painting fat over lean or

LONG AND SHORT OIL PAINT

Paint Quality and Oil Painting Mediums. The consistency and paint quality of oil colors can be controlled with the use of the oil painting mediums. The two fundamental oil paint qualities are called Short and Long Paint.

SHORT OIL PAINT : The oil paint as it

GUARANTEED FINEST QUALITY PERMANENT 100% PURE INGREDIENTS EXPERTLY FORMULATED MANUFACTURED AND TESTED

HIGH PIGMENT CONCENTRATION AND HIGH COLOR STRENGTH
ALL COLORS 100% FREE OF ADULTERANTS OR FILLERS
HIGHEST GRADE PERMANENT 100% PURE PIGMENTS
PROPER CONSISTENCY AND EVEN TEXTURE
COLORS OF OPTIMUM BRILLIANCE AND INTENSITY

HEALTH LABELING STANDARD CONFORMS TO ASTM D4236 Utrecht Manufacturing Corporation is an industry member of the Arts & Crafts Materials Institute. Utrecht supports the voluntary labeling standard of the Institute.

THE AP SEAL: Most Utrecht Colors bear the AP Approved Products Seal of the Art and Craft Materials Institute, Inc. are certified as being non-toxic in a program of toxilogical evaluation by a medical expert, subjected to review by the Institute Toxilogical Advisory Board, to contain no materials in sufficient quantities to be toxic or injurious to humans, or to cause acute or chromic health problems.

LIGHTFASTNESS CATEGORIES: • LIGHTFASTNESS 1 = EXCELLENT Represents excellent lightfastness. The great majority of colors Utrecht manufactures are extremely permanent.

 LIGHTFASTNESS 2= VERY GOOD Represents very good lightfastness. These colors are classified as durable.
 LIGHTFASTNESS 3 = MODERATE Represents moderate lightfastness.
 Utrecht has only one pigment in this category: Alizarin Crimson.

CODE: A = ACRYLIC W = WATERCOLOR 0=OIL

VEHICLES: ACRYLIC: 100% Acrylic Polymer Emulsion

Safflower oil.

WATERCOLOR: Pure Gum Arabic

YELLOWS

Azo Yellow Medium, A Hansa Yellow 4 GX (PY 73) Lightfastness: 1 • Transparent Azo Yellow Orange, A Diarylide Yellow HR 70 (PY83) Lightfastness: 1 • Transparent Pure Cadmium Yellow Lemon, A Pure Concentrated Cadmium Zinc Sulfide. (PY 35)Lightfastness: 1 • Opaque Pure Cadmium Yellow Light, A,W Pure Concentrated Cadmium Zinc Sulfide' (PY 35) Lightfastness: 1 • Opaque Pure Cadmium Yellow Medium, A Pure Concentrated Cadmium Sulfide (PY 37) Lightfastness: 1 • Opaque Pure Cadmium Yellow Deep, A, W Pure Concentrated Cadmium Sulfide (PY 37) Lightfastness: 1 • Opaque Cadmium Yellow Pale, 0 Pure Concentrated Cadmium Zinc Sulfide (PY 35) with barium sulfate Lightfastness: 1 • Opaque Cadmium Yellow Light, 0 Pure Concentrated Cadmium Zinc Sulfide [PY 35] with barium sulfate Lightfastness: 1 • Opaque Cadmium Yellow Medium, 0 Pure Concentrated Cadmium Sulfide [PY 37] with barium sulfate, Lightfastness: 1 • Opaque Cadmium Yellow Deep, 0 Pure Concentrated Cadmium Sulfide [PY 37] with barium sulfate, Lightfastness: 1 • Opaque Gesso Color Hansa Yellow Medium, A Hansa Yellow 4GX (PY 73) Lightfastness: 1 • Transparent Gesso Color Yellow Oxide, A Synthetic Hydrated Iron Oxide [PY 42] Lightfastness: 1 • Opaque

Hansa Yellow Pale, A Hansa Yellow 10G-41 (PY3) Lightfastness: 2 • Transparent Hansa Yellow Light, A Hansa Yellow 10G-41 (PY3) Lightfastness: 2 • Transparent Hansa Yellow Light, 0 Hansa Yellow 4GX (PY73), Zinc Oxide (PW4) Lightfastness: 1 • Semi-Opaque Mars Yellow, 0 Synthetic Hydrated Yellow Iron Oxide (PY42) Lightfastness: 1 • Opaque Naples Yellow Hue, 0 Hansa Yellow X (PY75) Synthetic Hydrated Yellow Iron Oxide (PY42) and Zinc Oxide (PW4) Lightfastness: 2 • Opaque Utrecht Yellow, A Hansa Yellow 4GX (PY 73) Lightfastness:! • Transparent Utrecht Yellow, 0 Hansa Yellow 4GX (PY 73), Zinc Oxide (PW4) Lightfastness: 1 • Semi-Transparent Yellow Oxide Ochre, A, Synthetic Hydrated Yellow Iron Oxide.(PY42) Lightfastness: 1 • Opaque Yellow Ochre, 0, W Natural Hydrated Yellow Iron Oxide. (PY43) Lightfastness: 1 • Opaque Zinc Yellow Hue, 0 Hansa Yellow 10G-41 (PY3) Zinc Oxide (PW4) Lightfastness: 2 · Semi-transparent

ORANGES

Pure Cadmium Orange, A,W Pure Concentrated Cadmium Sulfo - Selenide (PO 20) Lightfastness: 1 • Opaque Cadmium Orange, 0 Pure Concentrated Cadmium Sulfo-Selenide [PO 20] with barium sulfate Lightfastness: 1 Opaque • Gesso Color Hansa Orange, A Hansa Yellow 5R [PY 1 Modified] and Perinone Orange (PO 43) Lightfastness: 2 • Transparent Indo Orange Red , A Vat Orange OR (PO 43) Lightfastness: 1 • Semi-Transparent Utrecht Orange, 0 Hansa Yellow 5R (PY1 Modified) Indo Orange (P043) and Zinc Oxide (PW 4) Lightfastness: 2« Semi-Transparent Utrecht Orange, A Hansa Yellow 5R (PY1 Modified) Indo Orange (P043)Lightfastness: 2 · Semi-Transparent

REDS

Alizarin Crimson, A, 0, W Synthetic 1:2 Dihydroxyanthraquinone on Alumina Base (PR83) Lightfastness: 3 • Transparent Pure Cadmium Red Light, A, W Pure Concentrated Cadmium Seleno- Sulfide [PR 108] Lightfastness: 1 • Opaque Pure Cadmium Red Medium, A Pure Concentrated Cadmium Seleno- Sulfide [PR 108]Lightfastness: 1 • Opaque Pure Cadmium Red Deep, W Pure Concentrated Cadmium Seleno- Sulfide [PR 108] Lightfastness: 1 • Opaque Pure Cadmium Red Extra Deep, A Pure Concentrated Cadmium Seleno- Sulfide [PR 108] Lightfastness: 1 • Opaque Cadmium Red Light, 0 Pure Concentrated Cadmium Seleno-Sulfide [PR 108] with barium sulfate Lightfastness: I • Opaque Cadmium Red Medium, 0 Pure Concentrated Cadmium Seleno-Sulfide [PR 108] with barium sulfate Lightfastness: 1 • Opaque Cadmium Red Deep, 0 Pure Concentrated Cadmium Seleno-Sulfide [PR 108] with barium sulfate Lightfastness: 1 • Opaque English Red Light, 0 Synthetic Red Iron Oxide (PR101) Lightfastness: 1 • Opaque Gesso Color Alizarin Crimson. A Synthetic 1:2 Dihydroxyanthraquinone on Alumina Base. [PR 83] Lightfastness: 3 • Transparent Gesso Color Naphthol Red Medium,A NaphtholAS-D (PR 112) Lightfastness: 2 • Transparent Light Portrait Pink, A Napthol HF 35 (PR 188) Benzimidazolone

(P036) and Titanium Dioxide (PW6) Lightfastness: 1- Opaque Naphthol Crinison,A Naphthol Carbamide (PR170 F5Rk) Lightfastness: 2 • Transparent Naphthol ITR Red Light, A Naphthol RedFRLL(PR9) Lightfastness: 2 • Opaque Naphthol Permanent Red Light {In Jars) A. Naphthol Red (PR-112) FOR Lightfastness: 2 • Opaque Naphthol Permanent Red Deep, A Naphthol Carbamide (PR 170) F5RK Lightfastness: 2 • Opaque Naphthol Red Light, 0 Naphthol FOR (PR112) Zinc Oxide (PW4) Lighttastness: 2 • Semi-Opaque Quinacra Red, A Quinacridone Red (PV 19) Lightfastness: 1 • Transparent Red Oxide, A Synthetic Red Iron Oxide (PR101) Lightfastness: 1 • Opaque Utrecht Red, A Naphthol FOR (PR112) and Hansa Yellow 4GX (PY 73) Lightfastness: 2 • Semi-Transparent Utrecht Red, 0 Naphthol AS-D (PR112) and Hansa Yellow 4GX (PY 73) Lightfastness: 2 • Semi-Transparent

VIOLETS

Dioxazine Purple, A Carbazole Dioxazine (PV 23RS) Lightfastness: 2 • Transparent Gesso Color Dioxazine Purple, A Carbozole Dioxazine [PV 23RS] Lightfastness: 2 • Transparent Manganese Violet, 0 Manganese Ammonium Pyrophosphate (PV16) Lightfastness: 1 • Transparent 1 Permanent Violet, W (Complex Silicate of Sodium and Aluminum with Sulfur [PB 29] and Carbazole Dioxazine [PV23 RS], Lightfastness : 2 • Transparent Quinacra Violet, A c Quinacridone Violet (PV19) Lightfastness: 1 • Transparent Ultramarine Violet, 0 Complex Silicate of Sodium and Aluminum with Sulfur (PV15) Lightfastness: 1 • Translucent

BLUES

Brilliant Blue, A Copper Phthalocyanine (PB 15), Chlorinated Copper Phthalocyanine (PG7) and Titanium Dioxide (PW6) Lightfastness: 1 • Opaque Brilliant Blue Purple, A Complex Silicate of Sodium and Aluminum with Sulfur (PB29) Titanium Dioxide (PW6) Lightfastness: 1 • Opaque Pure Cerulean Blue, 0, A, W Oxides of Cobalt and Chromium (PB36) Lightfastness: 1 • Opaque Pure Cobalt Blue, A, W, 0 Oxides of Cobalt and Aluminum (PB28) Lightfastness: 1 • Translucent Cerulean Blue Hue, 0 Copper Phthalocyanine (PB15) and Zinc Oxide (PW4) Lightfastness: 1 • Semi-Opaque Cobalt Blue Deep Hue, 0 Complex Silicate of Sodium and Aluminum with Sulfur (PB29) Lightfastness: 1 • Translucent Cobalt Blue Hue, 0 Complex Silicate of Sodium and Aluminum with Sulfur (PB29) Lightfastness: 1 • Translucent Gesso-Color Phthalocyanine Blue,A Copper Phthalocyanine [PB 15] Lightfastness: 1 • Transparent Gesso-Color Ultramarine Blue, A Complex Silicate of Sodium and Aluminum with Sulfur (PB 29] Lightfastness: 1 • Translucent Phthalocyanine Blue, 0, A, W

Copper Phthalocyanine (PB15) Lightfastness: 1 • Transparent Turquoise Deep, A Copper Phihalocyanine (PB 15) and Chlorinated Copper Phthalocyanine (PG7) Lighifastness: 1 • Transparent Ultramarine Blue, A, 0, W Complex Silicate of Sodium and Aluminum with Sulfur (PB29) Lightfastness: 1 • Translucent Ultramarine Blue Light, 0 Complex Silicate of Sodium and Aluminum with Sulfur (PB29) Lightfastness: 1 • Translucent Ultramarine Blue Deep, 0 Complex Silicate of Sodium and Aluminum wi^h Sulfur (PB29) Lightfastness: 1 • Translucent L'iiecht Biue, A Copper Phthalocyanine (PB 15) and Titanium Dioxide (PW6) Lightfastness: 1 • Semi-Transparent Utrecht Blue, 0 Complex Silicate of Sodium and Aluminum with Sulfur (PB29) and Copper Phthalocyanine (PB15) Lightfastness: 1 • Transparent

GREENS

Chromium Oxide Green, A, 0 Anhydrous Chromium Sesquioxide (PG17) Lightfastness: 1 • Opaque Emerald Green, A Chlorinated Copper Phthalocyanine (PG7), Hansa Yellow FGL (PY97) and Titanium Dioxide (PW6) Lightfastness: 1 • Opaque Gesso-Color Phthalocyanine Green, A Chlorinated Copper Phthalocyanine [PG 7] Lightfastness: ! • Transparent Green Earth Hue, 0 Chlorinated Copper Phthalocyanine (PG 7) Natural Hydrated Yellow Iron Oxide (PY43) Amorphous Bone Carbon Black (PBk9) Lightfastness: 1 • Semi-Transparent Hookers Green Permanent, A Chlorinated Copper Phthalocyanine (PG7), Hansa Yellow 4GX (PY73) Synthetic Hydrated Yellow Iron Oxide (PY42) and Amorphous Bone Carbon Black (PBk9) Lighliastness: 1 • Semi-Transparent Phthalocyanine Green, A, 0, W Chlorinated Copper Phthalocyanine (PG7) Lightfastness: 1 • Transparent Permanent Green Light ,W Hansa Yellow 10G-41 [PY3] Chlorinated Copper Phthalocyanine [PG7] Lightfastness : 2 • Transparent Permanent Green, A Pure Concentrated Cadmium Zinc Sulfide (PY 35) Chlorinated Copper Phthalocyanine (PG7). Lightfastness: 1 • Opaque Permanent Green, 0 Chlorinated Copper Phthalocyanine (PG7)and Zinc Oxide (PW4) Lightfastness: 1 • Semi-Opaque Sap Green, 0

Chlorinated Copper Phthalocyanine (PG7) Hansa Yellow X (PY75) & Amorphous Bone Carbon Black (PBk9) Lightfastness: 2 • Semi-Transparent Utrecht Green, A Chlorinated Copper Phthalocyanine (PG7) and Hansa Yellow 4GX (PY 73) Lightfastness: 1 • Transparent Utrecht Green, 0 Chlorinated Copper Phthalocyanine (PG7) and Hansa Arylide Yellow 4GX (PY 73) and Zinc Oxide (PW4) Lightfastness: 1 • Transparent Viridian, 0, W Hydrous Chromium Sesquioxide [PG 18] Lightfastness :1 • Opaque Viridian Hue, A Chlorinated Copper Phthalocvaninc.(PG7). Natural Iron Oxide (PBr7) and Titanium Dioxide (PW6), Lightfastness: 1 • Opaque

BROWNS Burnt Sienna, A, 0, W Calcined Natural Iron Oxide, (PBr7) Lighttastness: 1 • Semi-Transparent Burnt Umber, A, 0, W Calcined Natural Iron Oxide (PBr7) Lightfastness: 1 • Opaque Gesso-Color Burnt Sienna, A Calcined Natural Iron Oxide [PBr7] Lightfastness: 1 • Opaque Gesso-Color Burnt Umber Calcined Natural Iron Oxide [PBr7] Lightfastness: 1 • Opaque Raw Sienna, A, 0, W Natural Iron Oxide (PBr7) Lightfastness: 1 • Opaque Raw Umber, A,0,W Natural Iron Oxide (PBr7) Lightfastness: 1 • Opaque

BLACKS

Gesso-Color Mars-Ivory Black Synthetic Black Iron Oxide [PBk 11] and Amorphorous Bone Carbon Black [PBk9) Lightfastness:! • Opaque Ivory Black, A, 0, W Amorphorous Bone Carbon Black (PBk9) Lightfastness: 1 • Opaque Mars Black, 0,A Synthetic Black Iron Oxide (PBkII) Lightfastness: 1 • Opaque Utrecht Black, 0 Synthetic Black Iron Oxide (PBkII) Amorphous Bone Carbon Black (PBk9) Lightfastness: 1 • Opaque •am important unique comhinulion of the best qualities of Ivory Black (an intense black with high tint strength) and Mars Black (a dense, opaque black, with heavier pigment particles)

GRAYS

Gesso-Color Neutral Grey, A Amorphorous Bone Carbon Black [PBK9] Natural Iron Oxide [PBr7] and Titanium Dioxide [PW 6], Lightfastness:! • Opaque Medium Gray, A Amorphorous Bone Carbon Black (PBk9), Natural Iron Oxide (PBr7) and Titanium Dioxide (PW6) Lightfastness: 1 • Opaque Paynes Gray, A, 0,W Amorphorous Bone Carbon Black (PBk9) and Complex Silicate of Sodium and Aluminum with Sulfur (PB29) Lightfastness: 1 • Semi-Transparent

METALLIC HUES

Iridescent Tinting Medium, A Titanium Coated Mica Flakes and Amorphorous Carbon [PBk7] Lightfastness: ! • Translucent Permanent Bronze, A Titanium Coated Mica Flakes and Amorphous f Permanent Bronze, A Titanium Coated Mica Flakes and Amorohous Carbon (PBk7) Synthetic Hydrated Yellow Iron Oxide (PY 42) Lightfastness: 1 • Opaque Permanent Silver, A Titanium Coated Mica Flakes and Amorphous Bone Carbon Black (PBk7) Lightfastness: 1 • Translucent Permanent Gold, A Titanium Coated Mica Flakes, and Synthetic Hydrated Yellow Iron Oxide (PY42) Lightfastness: 1 • Translucent

WHITES

Gesso-Color Unbleached Titanium, A Titanium Dioxide [PW 6], Natural Iron Oxide [PBR7] Lightfastness: 1 • Opaque Permanent Chinese White, W Titanium Dioxide [PW6] Lightfastness: 1 Titanium White, 0 Pigment: Titanium Dioxide (PW6) and Zinc Oxide (PW4), Lighttastness: 1 • Opaque Titanium White, A Titanium Dioxide (PW6) Lightfastness: 1 • Opaque Unbleached Titanium, A Titanium Dioxide (PW6) and Natural Iron Oxides (PBr7), Lightfastness: 1 • Opaque Utrecht Non-Yellowing White, 0 Titanium Dioxide [PW 6] and Zinc Oxide [PW4] Lightfastness:! • Opaque · The Vechicle for Utrecht While is Non-Yellowing Safflower Oil, which is chemically similar to Linseed Oil and is therefore safely inter-mixable with alt Utrecht Oil Colors. Utrecht Professional Gesso, A Titanium Dioxide [PW 6] and precipitated calcium carbonate, Lightfastness:! • Opaque Utrecht Artists Gesso, A Titanium Dioxide [PW 6] and precipitated calcium carbonate, Lightfastness:! • Opaque Utrecht Oil Priming White, 0 Titanium Dioxide [PW 6] and Zinc Oxide (PW 4) and Barium Sulfate Lightfastness:! • Opaque Zinc White, 0 Zinc Oxide (PW4), Lightfastness: 1 - Opaque

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Questions? Ask the Expert

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