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## **RICHESON CASEIN**

*The Shiva Series*

Versatile, Professional,  
Milk Protein-Based Medium

- Fast-drying, reworkable, water-soluble
- Milk protein-based paints
- Dries to a natural matte finish
- Great for underpainting & illustration work
- Apply in any manner – impasto to watercolor
- Suitable for a variety of surfaces
- Available in 37 colors

*Richeson Casein is a versatile, professional, watermedia known for its velvety finish!*

# Casein Basics

## What is casein paint?

Casein is a quick-drying, aqueous medium using a milk-based binding agent, and is one of the most durable mediums known to man. Nine thousand year old casein cave paintings have been discovered in Asia. Later, the medium was used by Byzantine, Roman and Renaissance artists, including the Old Masters. Caseins continue to be a popular choice for Illustration, Water Media, Furniture Restoration, Crafting, Reproductions and for underpainting with oil paints.

Known for their versatility and array of capabilities, casein paints can be used to create a variety of effects—from the rich opaques of oil to thin watercolor washes. Because casein has an exceptional integrity of color and always dries to a perfect matte finish, it is unexcelled for art reproduction. The velvety matte finish can also be buffed to a satin sheen or varnished to produce a resemblance to oils. Over time, casein pigments become resistant to moisture and—as history has proven—the medium has a durability and permanence which has easily stood the test of time.

Because it dries quickly, it is possible to lay down a glaze and move onto the next stage within a few hours instead of waiting for days, or even months, as with oils.

## Are caseins archival?

Yes. Properly cured and with a protective varnish, caseins can last longer than oils, especially oils on canvas. They also will not crack or yellow.

## How should I apply caseins?

You can apply caseins “juicy” like watercolors, impasto like oils or anything in between.

A rigid surface, such as a canvas panel, is critical when applying casein thickly (to prevent cracking if the surface is flexed). You can use a painting knife, brushes, cloth or even your fingers to apply casein to your surface.

## Can I mix casein with other paints and mediums?

Use casein over watercolor or gouache or as an underpainting for acrylic, pastel or oils. If using casein under oils, apply a barrier layer of Damar Varnish over the casein before applying the oil paint.

## Does casein colors change between wet and dry?

Wet and dry does look about a shade darker than it will when it dries. Get to know the paint by making yourself a color-mixing chart.

## Are casein paints transparent?

The degree of opacity varies from color to color, with white being opaque and affecting the opacity of other colors when mixed with them.

When you make your color chart, we recommend that you include a section for each color combination to be applied over a strip of a mid-tone gray or black to create an opacity reference.

## Casein & Underpainting?

Casein is also the perfect medium to use for underpainting. As long as an artist doesn't lay on casein too thickly, it's an excellent choice for underpainting because it's insoluble once it cures.

The casein will easily accept the oil and will form a good mechanical bond. Using acrylic gesso works fine with casein or oil paint because it has an 'open' surface to accept the paint layer and form a mechanical bond.

## Why does the color chart show a 95% color + 5% white wash?

Adding a touch of white to your casein colors will help you control your washes. 5% white will make washes lighten gradually from opaque to transparent instead of changing too rapidly.

## What is half-tone black?

The pigment in half-tone black is more finely dispersed than in the other casein colors. Think of it as a separate, transparent color, not “pale black.”

Half-tone black is meant to be applied as a glaze. Use it on your color mixing chart to show the effects of half-tone black over other casein colors. For instance, half-tone black over burnt sienna results in a beautiful purple.

# Tools & Surfaces

## Can I paint on stretched canvas?

Casein can be used on canvas, but only in very thin applications. Because cured casein can be brittle, we recommend that artists paint on rigid surfaces. If you want the texture of paint on canvas, canvas panels are the best solution.

## Can I paint on watercolor paper?

Rigidity counts. You can paint on 140lb. watercolor paper if the painting will be properly framed shortly after completion. 300lb. paper is a much better choice because of its stiffness.

## What about other surfaces?

Casein can be used on interior walls, metal, wood, laminates, metal, glass or ceramics.

Clean the surface thoroughly. On walls, metal, wood or laminates, prime the surface with a couple layers of gesso or a PVA glue such as Weldbond (mix 50/50 with water).

For slick surfaces like glass, ceramics or metal, use denatured alcohol to thoroughly clean the surface. You can then prime the surface with a PVA & water solution as above.

## What grounds can I paint on?

Rabbit skin glue, PVA glue, watercolor ground, clay ground and acrylic gesso. Make sure there is no oil in the grounds.

## What should I use for a palette?

Because casein will stain plastic palettes, a butcher tray, porcelain tray or a glass surface backed with a mid-tone gray paper provides an excellent mixing surface. Alternately, a disposable paper palette can be used for convenience.

## How can I keep casein from drying out on my palette?

Keep a spray bottle of water handy and spritz the paint on your palette periodically. Covering your

palette with plastic wrap (after spritzing) and putting it in your refrigerator overnight will keep it especially fresh.

## What kind of brushes work best with casein and what is the best way to clean them?

Casein, like acrylic, can be rough on brushes. Its heavy consistency can also be an issue. Use bristle brushes or synthetic soft hair, but never use one made from sable!

Keep your used brushes in a brush washer with the heads partially immersed in water until you clean them with water and dish soap. For especially stubborn colors, add a bit of ammonia to the soap before washing. Rinse very well and be sure to re-shape your brush head before setting it out to dry. Brush cleaners and conditioners are another way to keep your brushes usable for years to come.

# Glazing & Finishing

## What about glazes?

There are three methods of glazing caseins to avoid inadvertently lifting a previously painted layer.

Method #1: Wait two to three weeks until cured.

Method #2: Wait until casein is dry to the touch. Prepare your glaze by adding a small amount of paint to water or to Casein Emulsion. A little goes a long way – just be aware that Casein Emulsion used “straight” in this manner will dry to a semi-gloss finish, not casein's usual matte surface.

Method 3: Use a PVA glue such as Weldbond. Mix 1 part Weldbond to 3 parts water. If your painting is small enough, it may be easier to pour the glue solution over the painting and tilt it to cover the entire piece instead of brushing it on.

## What about varnish?

Varnish is a matter of preference. A gloss varnish intensifies the color, while a matte acrylic varnish will preserve that “authentic casein” look.

Wait until the surface has cured 2-3 weeks and no longer reconstitutes with water and then apply the varnish in the same manner as you would for an acrylic or oil painting.

If you don't have time to wait, you can use a spray varnish (applied in light coats in a well-ventilated area) within a day of the painting being dry to the touch. The casein will continue to cure even when varnished in this manner.





# Richeson Casein Sets & Mediums

## Basic Casein Set of 6

Set includes 1.25oz. tubes of: titanium white, ivory black, rose red, Naples yellow, ultramarine blue deep, Shiva green (phthalo).

#120533



## Casein Color Theory Set of 6

Perfect for color theory, casein has little color shift and mixes easily! Set includes 1.25oz. tubes of: Shiva rose, cadmium yellow light, ultramarine blue deep, cadmium orange, Shiva green (phthalo), Shiva violet.

#120550



## Casein Underpainting Set of 6

Water media and oil underpainting material in a basic warm and cool color set for every painter!

Set includes 1.25oz. tubes of: burnt sienna, raw umber, Payne's grey, yellow ochre, cadmium red pale, permasol blue.

#120560



## Wooden Box Set of 6

Contains the same colors as the basic set of 6, but this assortment comes packaged in an elegant, slide-top wooden box.

#120542

## Wooden Box Set of 12

This set contains 1.25oz tubes which are presented in a wooden slide-top box. Includes: titanium white, ivory black, rose red, light red, Naples yellow, yellow ochre, Shiva green (phthalo), ultramarine blue deep, Shiva blue, Shiva violet, burnt sienna, golden ochre.

#120541



## Casein Emulsion

The binder used to make casein paint. It can be mixed with casein paints to improve brushability or flow without altering other characteristics of the paint. For thin washes of casein use one part Casein Emulsion to five parts water.

#120730 Casein Emulsion 3.75oz.

#120731 Casein Emulsion 16 oz.



## Casein in Fine Art

### Richeson Casein and Water Media

Internationally known artist, author and workshop instructor Stephen Quiller has made his mark exploring the limitless opportunities of mixed media in works that can be described as a contemporary blend of abstract and representational.

"I started out painting in a more traditional way with transparent watercolor," explains Quiller, "but I found it limited my options. I began to explore other water-based paints, and over time, I discovered a combination of media helped me better capture the spiritual essence of the landscapes I was painting."

"I work with a variety of water media because they're compatible, yet have different characteristics that lend themselves to different aspects of a painting. I use casein because I love its velvety matte qualities and I find it's the perfect medium for depicting the low winter light in the mountains around my gallery and home in Colorado."

-Stephen Quiller



Painting by Stephen Quiller  
[www.stephenquiller.com](http://www.stephenquiller.com)



Painting by James Gurney  
[www.jamesgurney.com](http://www.jamesgurney.com)

"Casein is a water-based paint medium with working properties that resemble gouache, cel vinyl—and, in some respects, oil. I've used all of those latter paints quite a bit, but casein has qualities all its own. It can be used transparently, but it has great opacity when you need it, something often lacking in acrylic. Its one of the oldest paint mediums, dating all the way back to the Egyptians."

The paint has a delicious, unforgettable aroma that resembles the smell of cosmetics. The milk-based binder seals each layer enough so that they won't pick up with later application. The paint dries to an attractive matte surface that photographs very well, particularly in saturated tints, which is one of the reasons it was so popular with early illustrators.

Casein lends itself to bold, painterly handling and 'finding the image in the paint'. I think it's one of the best paints for oil painters who want to experiment in water media, or who need to find a paint that travels better than oil."

-James Gurney

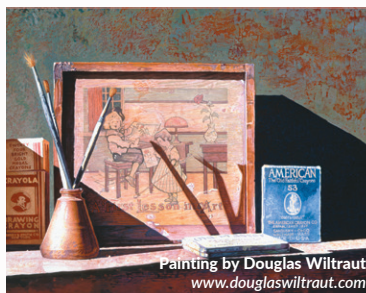
### Casein & Color Studies

Although he had used casein in college, Robert Tanenbaum didn't begin working with it seriously until the early 1970s when a fellow illustrator recommended its use particularly for highlights. It was much easier to use casein instead of watercolor or gouache.

With some experimentation, Tanenbaum found that casein was perfect for tight details and textures. Its quick drying properties made it ideal for preliminary color sketches and for underpainting.



Painting by Robert Tanenbaum  
[www.rtanenbaum.com](http://www.rtanenbaum.com)



Painting by Douglas Wiltraut  
[www.douglaswiltraut.com](http://www.douglaswiltraut.com)

### Casein & Egg Tempera

Doug Wiltraut, an experienced egg tempera painter, discovered the beautiful qualities casein has to offer. Egg tempera is characterized by pureness of color and luminosity, but it also has qualities that make it difficult to work with. Casein paints are able to achieve some of the beautiful qualities of egg tempera without some of its drawbacks.

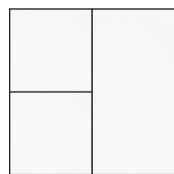
# RICHESON CASEIN

The Shiva Series ~ Available in 37 colors

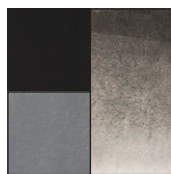
**Lightfastness: (LF)**

Excellent I, Very Good II, Fair III

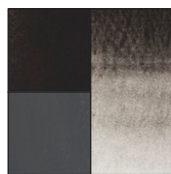
**Series: (S)** 1, 2, 3, 4



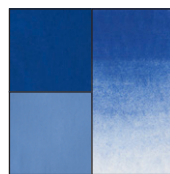
**Titanium White**  
120500 S:1 LF:I  
Pigment: PW6



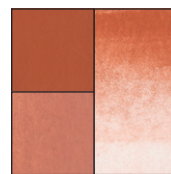
**Ivory Black**  
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Pigment: PBK9



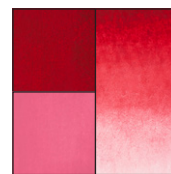
**Halftone Black**  
120502 S:1 LF:I  
Pigments: PBK7, PBR7



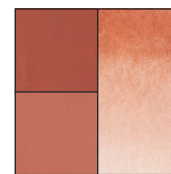
**Payne's Grey**  
120503 S:1 LF:I  
Pigments: PB29, PBK7



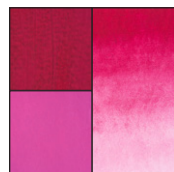
**Light Red**  
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Pigments: PR101, PR102



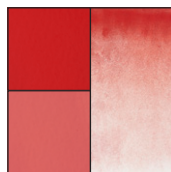
**Alizarin Crimson**  
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Pigment: PR83



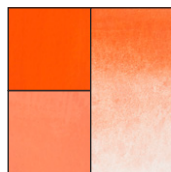
**Venetian Red**  
120506 S:1 LF:I  
Pigment: PR101



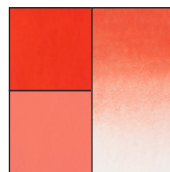
**Rose Red**  
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Pigments: PV19, PR122



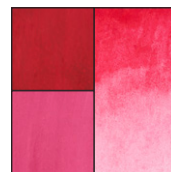
**Cadmium Red Deep**  
120508 S:4 LF:I  
Pigment: PR108



**Cadmium Red Pale**  
120509 S:4 LF:I  
Pigment: PR108:1



**Cadmium Red Scarlet**  
120510 S:4 LF:I  
Pigment: PR108:1



**Shiva Rose**  
120511 S:3 LF:III  
Pigments: PV19, PR83



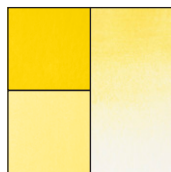
**Yellow Ochre**  
120512 S:1 LF:I  
Pigments: PY42, PY43



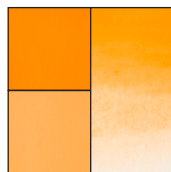
**Cadmium Yellow Lt.**  
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Pigments: PY3, PY35:1



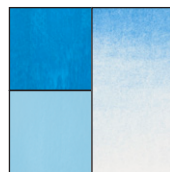
**Cadmium Yellow Med.**  
120514 S:4 LF:I  
Pigment: PY35



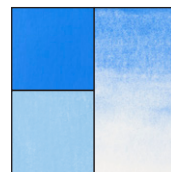
**Naples Yellow**  
120515 S:1 LF:II  
Pigments: PY3, PY42, PW6



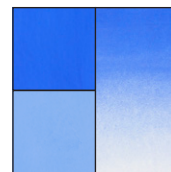
**Cadmium Orange**  
120516 S:4 LF:I  
Pigment: PO20



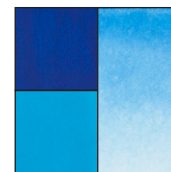
**Cerulean Blue**  
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Pigment: PB36



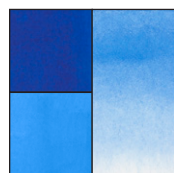
**Cobalt Blue**  
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Pigment: PB28



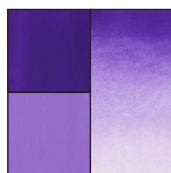
**Ultramarine Blue Dp.**  
120519 S:2 LF:I  
Pigment: PB29



**Shiva Blue (Phthalo)**  
120520 S:1 LF:I  
Pigment: PB15



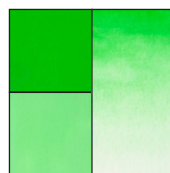
**Permasol Blue**  
120521 S:1 LF:I  
Pigments: PB15, PW6



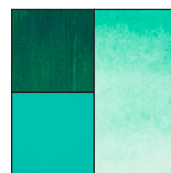
**Shiva Violet**  
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Pigment: PV23



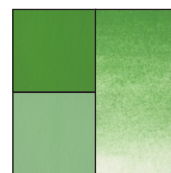
**Terra Verte**  
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Pigment: PG17



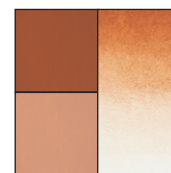
**Cadmium Green**  
120524 S:4 LF:I  
Pigments: PG7, PY35:1, PY3



**Shiva Green (Phthalo)**  
120525 S:1 LF:I  
Pigment: PG7



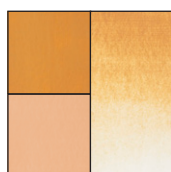
**Chrom. Oxide Green**  
120526 S:2 LF:I  
Pigment: PG17



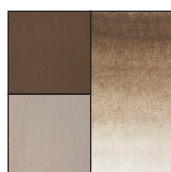
**Burnt Sienna**  
120527 S:1 LF:I  
Pigment: PR102



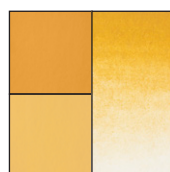
**Burnt Umber**  
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Pigment: PBR7



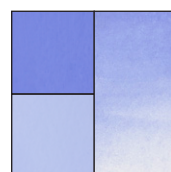
**Raw Sienna**  
120529 S:1 LF:I  
Pigment: PY42



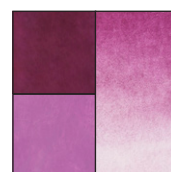
**Raw Umber**  
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Pigment: PBR7



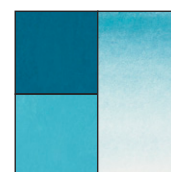
**Golden Ochre**  
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Pigment: PY42



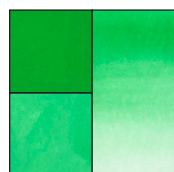
**Ultramarine Violet**  
120561 S:3 LF:I  
Pigments: PV15, PB29



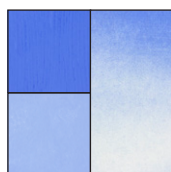
**Quinacridone Violet**  
120562 S:3 LF:I  
Pigment: PV19



**Phthalo Turquoise**  
120563 S:3 LF:I  
Pigments: PG7, PB29

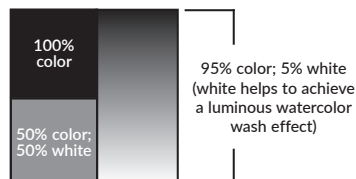


**Perm. Green Light**  
120564 S:4 LF:I  
Pigments: PG7, PY35:1, PY3



**Ultra. Violet Blue Sh.**  
120565 S:3 LF:I  
Pigments: PV15, PB29

Key:



## Helpful Tips for Caseins

- Choose a rigid, non-oily surface for work
- When working on a gessoed panel, correct any errors with an eraser or a 1:9 ammonia and water mixture
- Establish correct drawing and value patterns with a thin underpainting
- Dilute caseins with water to make washes and transparent glazes
- Lighten colors by adding more water or brighten them by adding powdered pigment
- To correct an overly dark area, cover it with a more opaque layer of a lighter color



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