

# Hair Swatch Study



Repair Beyond the Bond!  
 Proactive. Protection. ProBonding  
 Preventative Strength  
 Biomimetic chia derived  
 Support + Protect Hair Cuticle

## ABSTRACT

Hair is colored for various reasons giving way to many different tones, shades and types of dye available on the market. However, research indicates that colored hair is prone to rapid fading and that most color protection products do not live up to expectation. These products typically work to optimize the surfactant system of a shampoo or conditioner in order to reduce the harsh cleansing and subsequent dye diffusion out of the hair shaft. It is essential that these products are substantive to the hair and are otherwise not rinsed off.

Oxidative hair dyes are a more traditional method of permanently changing hair color. They produce an effect that is resistant to washing, compared to that of direct dyes, and are chosen to provide long term color changes, ranging from the subtle to the dramatic. However, permanent hair dyes are not resistant to hair color fade and damage initiated by wash-out, UV irradiation and the use of heat styling appliances. These can cause the tone of the original color to dramatically change to give dull, flat and brassy results. Oxidative dyes can be based on an alkaline agent and oxidative coloring agents. The alkaline agent has the effect of opening the hair cuticle so that the coloring and oxidizing agents can penetrate into the hair shaft. Color precursors are small molecules which only develop their own color tone once inside the hair. The oxidizing agent (usually hydrogen peroxide) is mixed with the color precursors prior to application. Oxygen is released by the reaction between the alkaline agent and the oxidizing product to stimulate the color-change. Large colored molecules are consequently formed within the hair's cortex.

In order to prevent diffusion of these color molecules from the hair cortex during washing and subsequent color fade, it is vitally important to seal the hair cuticle. **ProCutiGen®Bond** is a product designed to maintain the structural integrity of the hair cuticle in order to reduce the hair color fade as influenced by everyday aggressors such as washing and UV irradiation. When added to a conditioner, **ProCutiGen® Bond** not only vividly enhances the color deposit, but gives a gorgeous conditioning and shine value compared to the untreated conditioners.

**Code Number: 20829**

**INCI Name:** Salvia Hispanica Seed Extract

**INCI Status:** Conforms

**REACH Status:** Complies

**CAS Number:** 93384-40-8

**EINECS Number:** 297-250-8

**Origin:** Botanical

**Processing:**

GMO Free

No Ethoxylation

No Irradiation

No Sulphonation

**Additives:**

Preservatives: None

Antioxidants: None

Other additives: None

**Solvents Used:** Water

**Appearance:** Clear to Slightly Hazy  
Yellow to Amber Liquid

**Soluble/ Miscible:** Water Soluble  
91.80% Biodegradability

**Microbial Count:** < 100 CFU/g,  
No Pathogens

**Suggested Use Levels:** Reference  
Formulation Guidelines on Page 2

**Suggested Applications:**  
Hair Protection, ProBonding,  
Support, Nourishing

## Benefits of ProCutiGen®Bond:

- Protects and Strengthens Hair
- Great for All Hair Types
- Ideal for Chemically Damaged Hair
- Perfect for Pre and Post Treatments

# Hair Swatch Study

## MATERIALS AND METHODS

This study was conducted by salon professionals using virgin hair swatches. All hair swatches were dyed with temporary hair colors (blue, teal, orange, pink, and dark pink). After dyeing the hair swatches to the appropriate color, one set of hair swatches was conditioned with Pravana Nevo Color Enhancer while the other set was conditioned with Pravana Nevo Color Enhancer combined with **ProCutiGen® Bond**. All hair swatches were dyed with 1.0 oz. temporary color. Salon professionals mixed 1.0 oz. Pravana Nevo Color Enhancement Treatment with 1/8 oz. of **ProCutiGen® Bond**.

### Formulation Guidelines:

For 2.0 oz. or more of color conditioner, mix 1/4 oz. of **ProCutiGen® Bond**. For 2.0 oz. or less of color conditioner, mix 1/8 of **ProCutiGen® Bond**.

## RESULTS

Routine shampooing, heat styling and UV exposure are a few of the inevitable factors that can cause hair to lose its luster. Now, you can breathe new life into less-than-fresh color every time you condition. Specifically tailored to your hair color, this at-home treatment refreshes vibrancy and tone, while imparting strength and shine, to maintain the brilliance of color and the health of hair between salon visits. **ProCutiGen® Bond** exhibits both visual and sensorial properties that are most commonly associated with healthy, vibrant hair. This swatch study conducted by salon professionals demonstrates a clear difference in hair that has been treated, protected, and sealed using **ProCutiGen® Bond**. When added to a hair color conditioner, **ProCutiGen® Bond** enhances the color deposit while also providing a silky soft feel.

Achieve the hair color you have always wanted with **ProCutiGen® Bond**!

