



# hair color

## THE FACTS EVERY COLORIST SHOULD KNOW



@WellaProfessionals



@wellahair

[www.wella.com](http://www.wella.com)

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## HOW DOES PERMANENT OXIDATIVE HAIR COLOR WORK?

The key components of oxidative hair colorants are

- 1 Oxidative dye primaries & couplers
- 2 Alkalizing agent
- 3 Hydrogen peroxide

The alkalizing agent helps to open the outer hair layer. The oxidative primaries can then enter the hair fiber itself, reacting with oxidative couplers. This all takes place inside the hair fiber to form colored dyes which are too big to move out of the hair shaft so they remain in the hair providing permanent color.



### PPD and PTD in hair colorants

Today, a variety of dye primaries are used in hair colorants to create a full shade palette. Among them are two that are very common and more controversial because of their potential to cause an allergic reaction. They are paraphenylenediamine (pPD) and paratoluenediamine (pTD),

They are dye molecules used commonly in the hair color industry for decades because of their color performance, especially when it comes to lastingness and coverage of permanent colors.



# THE REVOLUTIONARY MOLECULE

Until today, the most used primaries in permanent hair color are PPD/PTD, for rich colors that perfectly cover gray hair. We have created a dye ME<sup>+</sup>, and formulated Koleston Perfect without PPD and PTD, reducing the risk of developing new allergies to hair color, while still creating rich shiny colors with up to 100% gray coverage.

At Wella Professionals, it is our mission to keep innovating with the healthiest technology. We know that allergies are on the rise, everywhere. Beauty products and professional hair color are not immune to the problem.

In fact pPD and pTD can potentially trigger a new allergy in non-allergic people. Consider your clients today. Some might develop a new allergy to hair color in the future.

Wella Professionals are the first in the industry to replace PPD / PTD with primary molecule ME<sup>+</sup>. Its molecular shape doesn't fit the receptor of the T-Cells so easily. That reduces the risk of developing a new allergy to hair color.

## ME<sup>+</sup> REDUCES THE RISK OF DEVELOPING A NEW ALLERGY TO HAIR COLOR.\*

\*FOR PEOPLE NOT ALLERGIC TO HAIR COLORANTS

Although the risk of developing new allergy is reduced, there remains a risk of allergic reaction that can be severe. Always perform an allergy alert test 48h before each coloration. Strictly follow safety instructions and consult [www.wella.com/kolestonperfect](http://www.wella.com/kolestonperfect). If your client has ever experienced an allergic reaction to hair colorants, you should not color. ME<sup>+</sup> is present in specific shades of Pure Naturals, Rich Naturals, Vibrant Reds, Special Blonde and Deep Browns of the Koleston Perfect brand.



### This is how an allergic reaction could happen

- + Everything that enters our bodies is checked by so called T-cells for potential danger.
- + Sometimes they identify harmless substances as dangerous and cause allergic reaction. This is the case for PPD and PTD.
- + Their shape can activate an immune response. This is how allergies occur.

## A CLOSER LOOK AT ALKALIZING AGENTS

### The two main alkilizers used for oxidative colors are Ammonia and MEA

At Wella Professionals we observe more and more brands talking about no ammonia or ammonia-free permanent colors. The truth is that ammonia free doesn't mean damage free.

#### Ammonia

It's a small molecule that when it contacts hair, causes the cuticles to open so the color can penetrate the hair. As soon as it does, the ammonia molecules quickly evaporate and that's what makes it briefly smell. The smell is a good sign: it means the chemicals are leaving the hair. Ammonia-free doesn't mean damage-free, in fact the replacement chemicals can be even more damaging, like MEA.

#### MEA

It's true MEA does not smell! However, because it does not evaporate so easily, when used at high concentrations it remains on the hair, keeping on damaging the hair until properly rinsed.

In higher concentration the MEA might stay on the hair – even after shampooing, and could cause long-term damage.

In lower concentrations MEA is fine like in our demi-permanent colours. But at higher concentrations scientific studies have proven that at equal effectiveness ammonia reduces hair damage when compared to MEA.

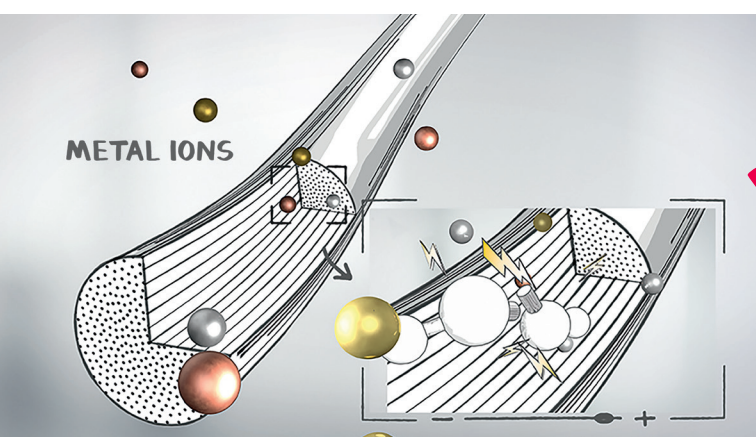
## HYDROGEN PEROXIDE H<sub>2</sub>O<sub>2</sub>

Hydrogen Peroxide is needed to oxidate the primaries and coupler and form the colored dye molecules. Once the dyes enter the hair shaft, the oxidation process creates the large dye molecules that can stay permanently inside the hair. Additionally, the hydrogen peroxide lightens some of the natural melanin, providing lift to virgin hair.



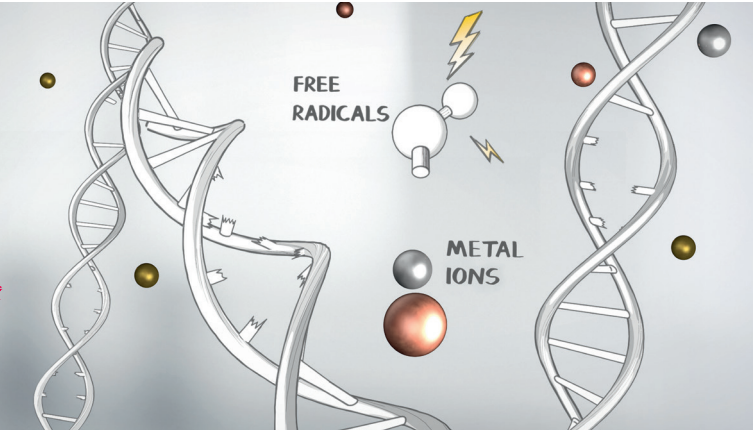
# KOLESTON PERFECT OUR BEST PERMANENT COLOR EVER

Pure Balance Technology. How it works.



Metals are present in hair, coming from water and through our body. They are more concentrated in the porous hair ends. Metals are not harmful, but when hydrogen peroxide meets with them they contribute to the formation of free radicals

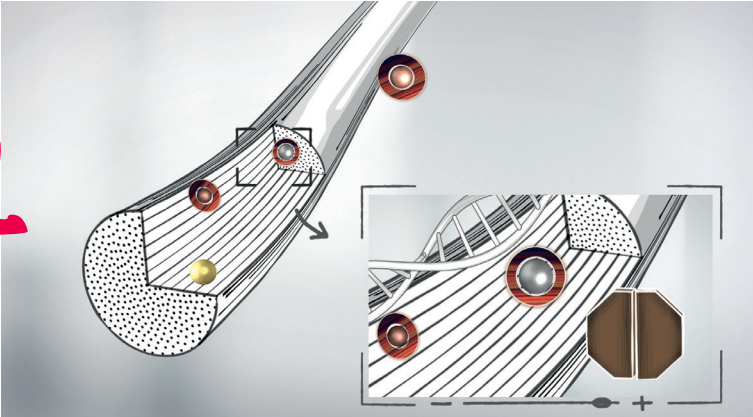
Free radicals can attack and break the bonds responsible for the hair integrity, causing damage.



Free radicals can also interfere with the color formation. They distract couplers from meeting the right primaries, so wrong color molecules can be formed and result in a shift in color tones.



PURE BALANCE TECHNOLOGY helps deactivating metals, which minimizes the formation of free radicals to help protecting hair bonds and minimize damage during coloring and for outstanding control of the right color formation from root to tip.



# ULTIMATE COLOR AND CLIENT CARE



Through **3** powerful trends



## 1. Coverage

Up to 100% gray coverage with healthy looking results.



## 2. Condition

Reduces the formation of free radicals for irresistible hair quality<sup>1</sup> with damage reducing technology.<sup>2</sup>



## 3. Ingredient-conscious

ME+ reduces the risk of developing a new allergy to hair color.<sup>3</sup> Free of animal derived ingredients.<sup>2</sup>

1 Versus previous Koleston Perfect. Valid for Koleston Perfect with Pure Balance Technology.  
2 Valid for Koleston Perfect with Pure Balance Technology.  
3 For people not allergic to hair colorants. Although the risk of developing new allergy is reduced, there remains a risk of allergic reaction that can be severe. Always perform an allergy alert test 48 h before each coloration. Strictly follow safety instructions and consult [www.wella.com/kolestonperfect](http://www.wella.com/kolestonperfect). If your client has ever experienced an allergic reaction to hair colorants, you should not color. ME+ is present in specific shades of Pure Naturals, Rich Naturals, Vibrant Reds, Special Blonde and Deep Browns of the Koleston Perfect brand.



# ALLERGIES

## THE FACTS

### What are allergies?

Allergies are unusual reactions to substances in our environment. An allergic reaction is a reaction by our immune system against normally harmless foreign substances, also called allergens. They are very widespread and present in the natural environment, in all types of foods, clothes and objects used every day. The human body can react to substances inhaled, swallowed, injected or come into contact with the skin. The large majority of people will never become allergic to a particular substance and are to use products containing allergens without any problems.

There are two main types of adverse reactions that may be experienced

1

### Irritant reactions and scalp discomfort

- + Are the most common adverse reactions and should not be confused with allergic reactions.
- + May cause tingling, itching and in few cases a slight redness of the skin.
- + Do not involve the immune system.
- + Are limited to the site of contact.
- + Can vary from day to day depending on a huge number of factors e.g. whether the client has washed their hair in the morning.
- + Are usually caused by a reaction to peroxide.
- + Clears up rapidly after ceasing to use the product that is causing the problem.

2

### Allergic reactions

- + Excessive reactions by our bodies to substances in our environment that are harmless to the majority.
- + Unlike irritant reactions, allergic reactions involve the body's immune system.
- + Possible symptoms can start with skin discomfort (burning, itching) and become severe, dizziness, blisters, faintness, shortness of breath or swelling. Immediate medical attention should be sought.
- + On rare occasions hair color can become an allergen and cause an allergic reaction. Usually caused by the hair color molecule e.g. PPD or PTD.
- + For allergic consumers the recommendation is to never use oxidative hair color and to seek medical advice.



# ALLERGIES

## Q&A



### What do I do if my client shows symptoms of an allergic reaction?

If during coloring clients experience any stinging or burning and/or rash, rinse immediately and discontinue use as this may be an indication of more serious reaction. DO NOT color their hair again and advise the client to consult a doctor or seek medical advice. If symptoms of a rapidly spreading skin rash, dizziness or faintness, shortness of breath and/or swelling to eyes/face are showing, rinse immediately and have client seek immediate medical attention and contact the manufacturer. If after coloring or on the following days the client experiences problems such as skin or scalp itching, skin or scalp rash, swelling to eyes/face, blistering and/or skin or scalp weeping have client seek immediate medical attention and contact the manufacturer.

### Can I apply Koleston Perfect on clients with an existing allergy to hair color?

No, if the client have a known hair dye allergy, don't use hair colorants. On an individual basis, each consumer that might have an allergy should consult with their dermatologist to identify if they can tolerate a hair colorant containing ME<sup>+</sup>. However, we need to keep in mind that if a client has ever experienced an allergic reaction to any hair colorant ingredient, such as pTD or pPD, they should not color as they cannot exclude being allergic to ME<sup>+</sup>.

### What do I do if my client has a reaction to the Allergy Alert test?

Do not apply the color and advise them to see their doctor.

### Why do I have to wait for 48 hours?

It takes up to 48 hours for the body to develop an immune system response, if you cut corners you risk missing a skin reaction.

### My client has previously reacted to the Allergy Alert test, what advice do I give?

They must not use any hair color product (including one from another manufacturer). You should advise them to go to their doctor.

### Why should I carry out an Allergy Alert test on my regular clients once a year (even when they have been visiting my salon regularly for color)?

Allergies may develop over time, which is why it is important that you keep a full history of previous color applications and that you check for allergies to hair colorants at least once a year.

### What color should I use to carry out the Allergy Alert test?

The color brand, developer and the exact shade chosen during consultation that will be applied. If using two different colors, both should be tested.

### Why does my client's skin tattoo make a difference?

Certain substances found in some skin permanent or temporary tattoos especially black henna tattoos may themselves cause an allergic reaction. This puts your client at an increased risk of a reaction when they have a hair color after their tattoo. It is important to check that it is safe to proceed by carrying out an Allergy Alert Test prior to the color service.

### My client wants their hair lightened (bleached). Do I need to do the Allergy Alert test?

No, an allergy alert test is not required for Wella lightening products including Blondor. Please check the safety requirements in your country.

### My client has reacted after this color application, what advice do I give?

If the reaction is immediate, and the color is still on head, the hair should be rinsed immediately and use of the product should be discontinued. If there is any rash, dizziness, faintness, shortness of breath or swelling, immediate medical attention should be sought. The hair should not be colored again before the client consults a doctor. If the reaction occurs after coloring, immediate medical attention should be sought.

### What do I do if I'm not sure whether the Allergy Alert test is ok or not?

If there is any doubt about the result of the test, or if the client shows a reaction to the test, then they should go to their doctor and no colorant should be applied.

### What information needs to be included on the client record card?

We would suggest that you include:

- + Condition of the scalp and hair.
- + Date of skin test.
- + Result of skin test.
- + Color services with dates and details (including brand, shade, developer).
- + In addition, you do need to keep a record of the outcome of the consultation for every client and every color visit.

### Should I keep a record of each Allergy Alert test?

We strongly advise you to do this (subject to local laws for the privacy protection of personal computer records). You need to keep records to show your duty of care.

### Where can I find further information?

Insert advisory helpline and website.





# SCALP DISCOMFORT THE FACTS



Koleston Perfect, like the entire Wella Professionals color portfolio has been tested to ensure scalp comfort when mixed properly with Welloxon Perfect according to usage instructions.

Clients may experience a small level of scalp discomfort like tingling or itching with permanent hair colors. It's mainly caused by the peroxide in the color creams, and the physiological conditions of the clients scalp. This is the case for a small percentage of all permanent color services.

Additionally, 1% of consumers are estimated to be allergic to PPD/PTD hair dyes – skin discomfort and skin burning/redness can be a signal of an allergic reaction.

## Q&A

### Why do some clients experience scalp discomfort during or after a hair color service?

A small percentage of all color clients might experience scalp discomfort due to the peroxide on the scalp and the physiological conditions of the clients scalp. This accounts for a small percentage of all applications on all hair colors, and is not unique to Koleston Perfect or Wella Professionals but a reality in all oxidative colors requiring peroxide.

### My client has experienced scalp discomfort in the past can I still apply Koleston Perfect for the next color service?

If an allergic reaction can be excluded, yes. Please do an allergy alert test before the next service and follow the checklist below.

### I have done an AAT and no allergic reaction showed, but once applied the color symptoms of discomfort (burning, itching) occurred. Can I continue using color after a negative AAT?

Most likely in this case an irritant reaction occurred. If an allergic reaction can be excluded, a further application can be recommended. If in doubt, ask the client to seek medical advice before a next color application.



## tips TO MINIMIZE

1. Do not shampoo the hair on the same day of the color application. The natural sebum builds a protective layer for the scalp.
2. Before applying color, ensure the scalp is intact.
3. Lower your Welloxon Perfect if necessary. This might reduce discomfort on sensitive clients (e.g. 6% down to 4%).
4. Do not use heat, like Climazon.
5. Correctly mix the color mass with the peroxide. It's important to mix thoroughly to ensure that no pockets of peroxide are left in the color mass.
6. Correct developer usage. It's important to use Welloxon Perfect and particularly important to not use a generic developer
7. When removing the color, emulsify properly with water, rinse until water is clear, shampoo and neutralize with Invigo Post Color Treatment, ensure to apply on scalp as well as on hair. Leave for 5 min. Rinse well.



# ALLERGY ALERT TEST

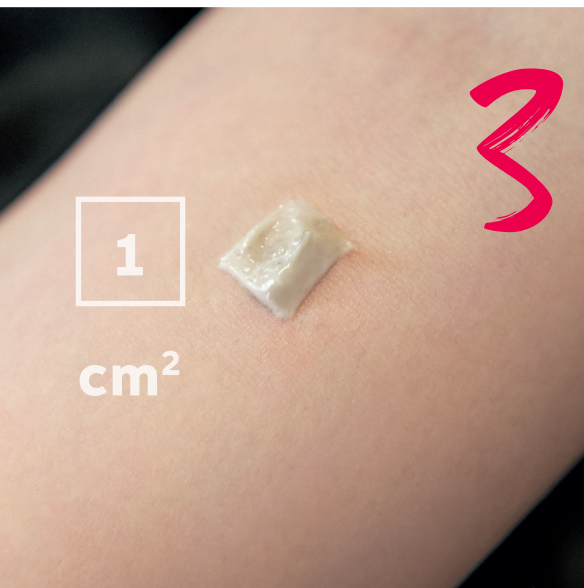
Although the risk of developing a new allergy is reduced, the danger of an allergic reaction – even a severe one – still exists. That’s why you should always perform an allergy alert test 48 hours before any color service.



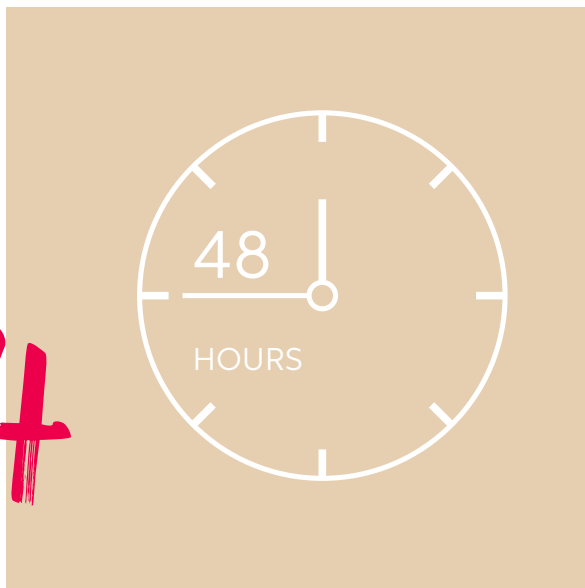
Mix 5g of the color you decided on during consultation with 5g developer.



Apply the color on to 1cm<sup>2</sup> directly below the crook of the elbow.



Leave the color uncovered for 45 minutes. Then rinse the area with lukewarm water and pat dry with a clean towel.



Ask the client to either come back to the salon after 48h or call you to inform you of the result.

Ask your client to leave the test area undisturbed for 48 hours. If there are any signs of redness, burning or itching the color product must not be applied. The client must seek medical advice before coloring her hair again. If your client has ever experienced an allergic reaction to hair colorants you should not color.

# QUESTIONNAIRE

If the client answers ‘NO’ to all the questions, you can proceed with the color service on this occasion without doing an Allergy Alert Test. Complete the client record card confirming all the color service details.

1. Has your client ever had an allergic reaction to any hair colorant product?
2. Has your client ever had an allergic reaction to any type of skin tattoo, including henna or to permanent make-up?
3. Does your client have a sensitive, itchy or damaged scalp (e.g. suffer from eczema or psoriasis of the scalp)?
4. Is your client currently taking any medication to treat allergies?

5. Is this a new color client for your salon or are you using a different brand/shade than normal?
6. Has it been more than 6 months since your client last had a color in your salon?
7. Is it more than 12 months since your client’s last allergy alert test?
8. Has your client had any type of skin tattoo, including henna or permanent make-up, since their last color service?
9. Has your client had an allergic reaction to any products since their last color service?

*stop!*

IF ANSWERED "YES" TO ANY QUESTION

Explain to your client that you cannot color the hair unless they first get advice from their doctor.

*warning!*

CARRY OUT AN ALLERGY ALERT TEST IF ANSWERED "YES" TO ANY QUESTION