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# *PPD IN HAIR COLOR PRODUCTS*

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## **WHAT IS PPD? WHAT IS IT USED FOR?**

Para-phenylenediamine (PPD) is a substance used in the majority of permanent hair color products. PPD is the only product (except for para-toluenediamine (PTD), which is chemically very similar) that procures the darkest tints and covers gray hair in a lasting manner.

Permanent oxidative coloration is obtained by mixing hair colorants such as PPD with an oxidizing agent (e.g.: hydrogen peroxide solution) in appropriate proportions to obtain the required tint. The resulting mixture is then applied to the hair for an appropriate time. Permanent coloration is the most frequently used since it meets the performance expectations of hairdressers and consumers.

## **WHAT ARE THE POTENTIAL RISKS?**

The PPD in hair color products is frequently singled out for its allergic potential. The experts of the European Scientific Committee on Consumer Safety recently reviewed all the scientific data and confirmed the safety of the substance in hair color products at a concentration not exceeding 2% in the final mixture applied to the hair. At high concentrations, PPD is, however, liable to induce rare cases of allergy in certain subjects.

Certain temporary henna tattoos available in the form of black ink contain high concentrations of PPD of up to 20%. The products remain in prolonged contact with the skin (they are not rinsed off unlike hair-color products), do not comply with current regulations and should therefore not be offered to consumers. A black henna tattoo considerably increases the risk of the consumer becoming allergic to PPD. Consumers who have become allergic to PPD following black henna tattooing will frequently trigger a cutaneous allergic reaction when they apply a hair color product containing only low concentrations of PPD.

## **WHY ARE THE L'ORÉAL HAIR-COLOR PRODUCTS CONTAINING PPD SAFE?**

Hair color products and the colorants they contain, including PPD, are among the cosmetic ingredients and products whose safety has been the most regularly studied. They are thus subject to very strict regulatory monitoring worldwide in order to ensure consumer safety. Our hair color products containing PPD are of course compliant with the most restrictive cosmetic regulations. We have managed to optimize the PPD concentrations in our coloration products in order to ensure that the concentrations are substantially below the regulatory limit of 2%. This provides a further assurance of safety for consumers.

In order to prevent the risk of skin allergy, we recommend systematically conducting a cutaneous allergy test 48 hours before coloration, in rigorous compliance with the instructions on the packaging and method of use of all our products. The labeling of our products also features a special warning for people having already undergone black henna tattooing. Under normal conditions of use, our hair color products containing PPD may be used by consumers in all safety.

**L'ORÉAL**