



PATIENT INFORMATION LEAFLET: Para phenylenediamine (PPD)

Your patch test shows that you have a contact allergy to: Paraphenylenediamine (PPD) free base

Synonym(s): PPD, Phenylenediamine base, p-Phenylenediamine, 4-Phenylenediamine, 1,4-Phenylenediamine, 4-Benzenediamine, 1,4-Benzenediamine, para-Diaminobenzene (p-Diaminobenzene), para-Aminoaniline (p-Aminoaniline), Orsin™, Rodol™, Ursol™

Definition: PPD is a chemical substance that is widely used in hair dyes and it may also be illegally present in dyes to tint eyelashes and eyebrows. It may be found in dark and light color dyes such as those used for highlights although it is found in a higher concentration in dark dyes. Furthermore, it is used in the textile and photographic industries.

Use and occurrence:

- In (semi) permanent hair dyes
- Temporary black henna tattoos
- Disperse dyes (chemically related to PPD) are used in the production of textiles, stockings, fur, and leather
- Rubber and plastics manufacturing, epoxy resin hardeners
- Photographic developing fluids
- Photocopying dyes and printing inks
- In the tire industry

Remarks:

There are several PPD related substances which may also cause an allergic reaction. These include other "para" compounds like:

- Para-toluenediamine
- Para-aminobenzoic acid (PABA) in sun filters
- Para-aminosalicylic acid in plastic and rubber additives

And other compounds including:

- Azo- and aniline dyes
- Sulphonamides: a systemic antibiotic
- Diaminodiphenyl methane: rubber and plastic additives
- Benzocaine and procaine: in local anesthetics



For hairdressers: it is possible to protect your hands by using nitrile gloves. Avoid latex rubber gloves as dye can penetrate these gloves. Change your gloves often. Avoid cutting newly dyed hair without gloves but previously dyed hair should not be a problem. Consider cutting hair before dying.

Semi-permanent or temporary hair dyes that claim to be PPD-free or related dyes including henna dyes may **not** be safe. Pure henna is usually fine to use.

Disclaimer: Always check your products as these lists can never be complete and ingredients change.