



Paraphenylenediamine (PPD)

Your patch tests show you have a contact allergy to paraphenylenediamine (PPD). This means that you should avoid contact with all products containing paraphenylenediamine in the future.

PPD is a permanent hair dye which is found in dyes used in hairdressing salons and in home colouring products. It is also used to tint eyelashes and eyebrows. It may be found in dark and light colour dyes such as those used for highlights although it is found in a higher concentration in dark dyes. The patch test done by hairdressers prior to a treatment may help to detect a problem but is not reliable.

If you are a hairdresser it is possible to protect your hands by using nitrile or plastic gloves but 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 dyeing.

Some related dyes may also cause problems and should usually be avoided too. These include:

- toluene-2,5-diamine sulfate (4-toluenediamine, PTD)
- 2-nitro-p-phenylenediamine (2-nitro-4-phenylenediamine)
- m-aminophenol and p-aminophenol
- p-methylaminophenol sulfate
- methoxymethylparaphenylenediamine

PPD may also be found in:

- Some semi-permanent hair dyes
- Temporary black henna tattoos
- Fur, leather and clothing dyes
- Rubber and plastics manufacturing, epoxy resin hardeners
- Photographic developing fluids
- Photocopying dyes and printing inks

Semi-permanent or temporary hair dyes that claim to be PPD-free or related dyes including henna dyes may **not** be OK. Dyes that are usually fine to use include pure henna, henna and indigo dyes, bismuth citrate dyes. Always check ingredients carefully.