



Patient Information Leaflet p-phenylenediamine

You are allergic to p-phenylenediamine.

This is the most commonly used permanent hair dye. P-phenylenediamine is packaged with hydrogen peroxide and a 'coupler'. P-phenylenediamine is colourless until it is oxidised by hydrogen peroxide. The coupler then "locks" the dye within the hair shaft.

p-phenylenediamine, like most permanent hair dyes, belongs to a chemical group known as aromatic amines. Other aromatic amines used as dyes include: **para-toluenediamine** **toluene-2,5-diamine**; **para-aminodiphenylamine**; **2,4-diaminoanisole**; **o-aminophenol**; **p-aminophenol**; **m-aminophenol**. As all aromatic amines have a similar structure there is a significant risk that if you apply any one of these alternatives you may cause a dermatitis reaction.

Some permanent eye lash tints contain a chemical similar to p-phenylenediamine; these, too, should be avoided.

Some temporary 'henna' tattoos, often performed whilst on holiday, actually contain p-phenylenediamine, sometimes in a very high concentration and it is essential that you avoid these.

Allergy to p-phenylenediamine can cause work related hand dermatitis in hairdressers. In a recent study of the protection given by gloves against skin contamination with the dye, all gloves were found to give some protection; In general, we recommend either disposable vinyl or disposable *non-powdered* latex gloves (and disposed of properly) or reusable hairdressing vinyl gloves. It is essential that gloves are worn for protection.