

p-phenylenediamine

also known as 4-para-phenylenediamine [4-PPDA or PPD]

On labels, this chemical dye will be listed as p-phenylenediamine. It's often listed in small print, and the name can be hard to locate in the ingredient list.

PPD is the main coloring agent in hair dyes. It is found in almost all currently available permanent hair dyes, and in many demipermanent and semipermanent hair dyes. It is found in both salon dyes and in drugstore dyes. PPD is the most common cause of allergic reactions to hair-coloring products. PPD is also sometimes added to black henna temporary tattoos [used on the skin] so these should be avoided completely.

Labels stating "all-natural" "ammonia-free" "hydrogen peroxide free" and "henna" DO NOT MEAN THESE PRODUCTS ARE NECESSARILY SAFE TO USE. You will still need to read labels.

For those who still wish to color their hair, there are some options. These products usually do not cover gray as well, and do not last as long. Product formulations frequently change, so even for the products listed below, always ask questions and ALWAYS READ LABELS. [And, as always, purchase products with caution, as we cannot certify any of these manufacturers/salons and cannot confirm their business practices.]

1. Highlights: these are bleaching agents and usually do not contain PPD. [Note that "lowlights" often do use PPD and should be avoided]
2. Temporary hair color rinses, which wash out after shampooing. Some of the newer temporary hair color washes make use of FD&C and D&C dyes, which are different than PPD.
3. Some salon dyes may be okay. One example is Elumen hair dye made by Goldwell.
4. Pure henna, which comes from a plant, gives a reddish tint to hair. Make sure that you are buying pure henna, as some newer forms, sometimes known as "black henna", add PPD to the henna. Pure henna, however, will be fine. Some companies sell henna and indigo [also from a plant], and this combination can produce more of a black color. One example of a company would be www.hennahut.com

Some other options may or may not be okay.

1. A demipermanent dye that uses toluene-2,5-diamine sulfate [TDS] may or may not be an option. **Patch testing is recommended before using any product that contains TDS,** since it is estimated that half of persons allergic to PPD will have reactions to TDS. If you were patch tested to TDS, and were negative on testing, then you may be able to use several products that are sold at drugstores or are applied in salons. Examples: Ion Color Brilliance PPD-free crème permanent hair color or Wella Color Charm demipermanent dye, both available through Sally Beauty Supply.

When you're allergic to PPD, you may react to other substances also. While not everyone will be allergic to these other, related chemicals, you should be aware that occasionally they may cause problems.

1. Azo dyes: may be used as clothing dyes, fur or leather dyes, and in some inks
2. PABA: found in some sunscreens and some makeup that contains sunscreen
3. Benzocaine: a type of topical anesthetic [numbing cream]
4. Medicated creams containing sulfonamides