

Your TRUE TEST results indicate that you have a contact allergy to p-phenylenediamine. This contact allergy may cause your skin to react when it is exposed to this substance, although it may take several days for the symptoms to appear. Typical symptoms include redness, swelling, itching and fluid-filled blisters.

p-phenylenediamine is a dark dye used in almost all permanent hair dyes and in some semipermanent hair colorings such as henna.

WHERE IS P-PHENYLENEDIAMINE FOUND?

At work, you may find p-phenylenediamine in:

- Dyes and coloring agents for textiles, furs and other products
- Permanent and some semipermanent hair dyes
- Photographic developers
- Temporary, paint-on and black henna tattoos
- Black rubber products and equipment parts
- Printing inks

At home, you may find p-phenylenediamine in:

- Permanent and some semipermanent hair coloring products
- Photographic developers
- Textile and fur dyes
- Temporary, paint-on and black henna tattoos
- Coloring agents for facial hair
- Printing inks

HOW CAN YOU AVOID P-PHENYLENEDIAMINE?

- Only use products that do not list p-phenylenediamine or related chemicals on the label, ingredient list or Material Safety Data Sheet (MSDS). If no information is available, talk to your pharmacist or doctor.
- Tell your physician, pharmacist, dentist, veterinarian, beautician and hairdresser that you are allergic to p-phenylenediamine. Ask for preparations that do not contain p-phenylenediamine or related substances. Be sure to test hair coloring products before use according to the manufacturer's directions.
- You also may react to some textile dyes related to p-phenylenediamine. Talk to your doctor about avoiding clothing, fabric and furs in certain colors.
- If you must use products containing p-phenylenediamine on others, wear protective gloves. Utility and disposable gloves made of natural or synthetic rubber or vinyl may provide sufficient protection to work with p-phenylenediamine depending on the product.
- If you think that you contact p-phenylenediamine at work, ask your employer for MSDS or manufacturer information on the product(s). Talk to your employer about using a different product or about wearing protective gloves and clothing.

WHAT SHOULD YOU LOOK FOR AND AVOID?*

Avoid products with the following names in the list of ingredients, MSDS, or package insert.

- p-phenylenediamine or paraphenylenediamine
- 4-phenylenediamine
- phenylenediamine
- p-diaminobenzene
- 4-aminoaniline
- 1,4-benzenediamine
- 1,4-diaminobenzene

You also may react to p-phenylenediamine-related substances in textiles, hair colorings and other products:

- Aniline yellow dyes such as p-aminoazobenzene or p-dimethylaminoazobenzene
- 4,4'-Methylenedianiline in some rubbers, plastics and epoxy resins
- Other aminobenzene-related compounds
- Disperse Orange dye 1-amino-2-methylantraquinone
- Hair dye p-toluenediamine

*These lists are brief and provide just a few examples. Read product labels carefully and talk to your doctor if you have any questions. Product formulations may change from time to time without notice. Talk to your doctor for specific instructions. For additional information about products that might contain **p-phenylenediamine** or a related substance, go to the Household Products Database online (householdproducts.nlm.nih.gov) at the United States National Library of Medicine.