

### the art and science of smart patch testing®

# NA83: Disperse Blue Mix 124/106

#### **Patient Information**

Your patch test results indicate that you have a contact allergy to disperse blue 124/106. 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.

#### Where is disperse blue mix 124/106 found?

Disperse blue 124/106 is a mix of two of the most commonly used thiazolazoyl-p-phenylene diamine derivative dyes. These dyes are used primarily in synthetic textiles and are significant skin sensitization hazards. Disperse dyes are used to color polyester fabrics and blends. Some patients with disperse dye allergy also react to para-phenylenediamine. Disperse dyes are released from synthetic fabrics such as polyester, acetate, and nylon. Disperse blue dyes are commonly found in black or navy blue acetate liners of dress clothing, or in dark-colored polyester velour and in children's diapers. Because perspiration encourages dye release, dark-colored synthetic exercise garments should be considered as a source of textile pattern dermatitis. Compared with acetate and polyester, disperse dyes are more color-fast on nylon, but nylon stockings can be the culprit in dermatitis of the thighs in women sensitized to disperse dyes. Disperse dyes sometimes cause dermatitis of unusual morphology with a pigmented purpuric quality. Avoidance of textile dyes is very difficult as there is no product labeling of the dyes used in the United States. There is poor correlation between positive patch tests to disperse dyes and presence of those dyes in the garments that patients suspect as the cause of their symptoms. Patients allergic to a disperse dye should be instructed to avoid polyester and acetate fabrics (and nylon, if possible) that could contain the color in question. True white (not off-white) synthetic fabrics would be the safest choice for these patients. One hundred percent cellulosic fabrics such as cotton, rayon, or Tencel®, or 100% silk, linen, or wool of any color are also good choices. Dyes are water soluble, and washing clothing before use may be of some benefit in removing dye.

## How can you avoid contact with disperse blue mix 124/106?

Avoid products that list any of the following names in the ingredients:

- Disperse blue 124
  - C.I. Disperse Blue 124
  - EINECS 239-203-6
  - Serisol 2RD
  - 2-(N-Ethyl-4-((5-nitrothiazol-2-yl)azo)-m-toluidino)ethyl acetate
- Disperse blue 106
  - 2-(Ethyl(3-methyl-4-((5-nitro-2-thiazolyl)azo)phenyl)amino)ethanol
  - C.I. Disperse Blue 106
  - Ethanol, 2-(ethyl(3-methyl-4-((5-nitro-2-thiazolyl)azo)phenyl)amino)-

# What are some products that may contain disperse blue mix 124/106?

- Acetate
- Azo Dyes
- Diapers
- Nylon
- Polyester Fabrics and Blends
- Polvester Velour
- Seatbelts
- Synthetic Textiles

<sup>\*</sup>For additional information about products that might contain **disperse blue mix 124/106**, go to the Household Product Database online (<a href="https://householdproducts.nlm.nih.gov">householdproducts.nlm.nih.gov</a>) at the United States National Library of Medicine. These lists are brief and provide just a few examples. They are not comprehensive. Product formulations also change frequently. Read product labels carefully and talk to your doctor if you have any questions. These are general guidelines. Talk to your doctor for more specific instructions.

