

19 Mercaptobenzothiazole – Patient Information

Your T.R.U.E. TEST results indicate that you have a contact allergy to mercaptobenzothiazole (MBT). 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.

You are most likely to contact mercaptobenzothiazole when using, wearing or handling natural or synthetic rubber products at work or at home. Work shoes and athletic shoes are often made with rubber components that contain mercaptobenzothiazole or related substances.

Where is mercaptobenzothiazole found?



At work, you may find mercaptobenzothiazole in:

- **Industrial and safety products** made with natural rubber, butyl rubber, nitrile or neoprene - such as boots, shoes, adhesives, plugs, goggles, mats, headphones, masks, respirators, aprons, gloves, cords, tubing, insulation, and sheeting
- **Office products** made with natural rubber, nitrile or neoprene - such as rubber bands, erasers, mats, and utility gloves
- **Health care equipment** made with natural rubber, butyl rubber, nitrile or neoprene - such as medical and utility gloves, masks, bed sheeting, dental dams, anesthesia equipment, aprons, and tubing
- **Sports equipment** made with natural rubber, butyl rubber, nitrile or neoprene - such as wetsuits, shoes, boots, masks, racquet and club handles



At home, you may find mercaptobenzothiazole in:

- **Household products** made with natural rubber, butyl rubber, nitrile or neoprene - such as rubber bands, ear-and headphones, masks, condoms and diaphragms, goggles, shoes, utility gloves, swimwear, toys, hoses, tubing, and elastic
- **Sports equipment** made with natural rubber, butyl rubber, nitrile or neoprene - such as shoes, wetsuits, boots, masks, racquet and club handles

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How can you avoid mercaptobenzothiazole?

- Avoid direct skin contact with rubber products in your car, at work and at home. Use rubber-free alternatives made of vinyl, plastic, leather, wood or fabric. Avoid rubber boots, shoes and insoles.
- Use fabric or plastic films to handle rubber products and avoid direct skin contact.
- Only use products that do not list mercaptobenzothiazole or related chemicals on the label, ingredients list or Material Safety Data Sheet (MSDS). If there is no information, contact the product manufacturer.
- Tell your physician, pharmacist, dentist, veterinarian, beautician and hairdresser that you are allergic to mercaptobenzothiazole, which is often used in rubber products. Ask for products that do not contain mercaptobenzothiazole or related substances.
- Wear protective gloves and clothing made of leather, fabric or rubber that is free of mercaptobenzothiazole.
- Use heavy duty non-rubber gloves (Allerderm® Heavy Duty vinyl or Silvershield®/4H® gloves) when working with chemicals that might contain mercaptobenzothiazole.
- If you think that you contact mercaptobenzothiazole at work, ask your employer for MSDS or manufacturer information on the product(s). Talk to your employer about using a different product, or wearing different protective gloves and clothing.

What should you look for and avoid?*

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

- **Mercaptobenzothiazole** (MBT) or 2-mercaptobenzothiazole; 2-benzothiazolinethione; 2-benzothiazolethiol; benzothiazole-2-thione; 2-benzothiazolyl mercaptan

Because mercaptobenzothiazole is used in certain types of rubber products, you may also react to other substances used in the manufacture of rubber, such as *thioureas*. If your skin is regularly exposed to rubber, you may develop reactions to other substances in rubber, such as *thiurams*, *carbmates* and *mercapto mixes*.

What are some products that may contain mercaptobenzothiazole?*

- Natural rubber, butyl rubber, nitrile or neoprene rubber products
- Allerderm® nitrile medical exam gloves
- Microflex® FreeForm SE nitrile medical exam gloves
- N-Dex® nitrile medical exam gloves

What products may NOT contain mercaptobenzothiazole?*

- Elastifree® and Elastylite® surgical gloves (thermoplastic copolymer)
- N-Dex® Free Ultimate nitrile exam gloves
- Products made entirely of vinyl (PVC), plastic, silicone, polyurethane, polyethylene or acrylates
- Ultra Preserve® neoprene surgical and exam gloves
- Allerderm® Vinyl medical exam gloves (powder free)
- Allerderm® Heavy Duty Vinyl utility gloves
- Silvershield®/4H® chemically resistant gloves
- True Advantage® nitrile surgical and exam gloves

*For additional information about products that might contain mercaptobenzothiazole or a related substance, go to the Household Product Database online (<http://householdproducts.nlm.nih.gov>) 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 questions. These are general guidelines. Talk to your doctor for more specific instructions.