

11 Ethylenediamine Dihydrochloride – Patient Information

Your T.R.U.E. TEST results indicate that you have a contact allergy to ethylenediamine. Ethylenediamine (EDD) in contact with your skin may result in dermatitis. 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.

Ethylenediamine is a substance that is used to manufacture various drugs and industrial compounds. EDD is a colorless liquid that is used as a preservative, emulsifier and stabilizer in certain medical creams, cosmetics and a variety of other products.

Where is ethylenediamine found?



At work, you may find ethylenediamine used in the manufacture of:

- Bleach activators
- Drugs and polyamines
- Lubricants and waxes
- Metal-binding agents, known as chelators
- Curing agents in epoxy resins and coatings
- Surfactants, emulsifiers and dispersants
- Binders for printing inks
- Urethane foam catalysts
- Textile dye-assist compounds
- Carbamates for fungicides and rubber additives
- Fuel additives and corrosion inhibitors



At home, you probably won't find ethylenediamine - even though it has been used as a starting material to produce many drugs, laundry additives, fungicides, and cured epoxy products.

Some antihistamines used in the treatment of asthma, hay fever, motion sickness and hives may cross react with EDD. You may have a general skin reaction to these antihistamine drugs as well as to aminophylline drugs used for asthma which may contain EDD as an impurity.

Rarely, a few individuals with ethylenediamine allergies may develop skin reactions to some piperazine-related drugs, including some antihistamines. Talk to your doctor if you have any reactions to these medications.

You may be exposed to EDD through industrial products such as solvents, textile resins, inhibitors, antifreezers, epoxy hardeners and coolant oils.

Water-based industrial products may contain EDD as a fungicide. EDD is also a component of some dyes, insecticides and synthetic waxes.

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How can you avoid ethylenediamine?

- Avoid direct skin contact with chelators and the substances used to manufacture carbamates, epoxy resin curing agents, fuel additives, and the other industrial products listed above.
- Do not use products that list ethylenediamine or related chemicals on the label, ingredients list or Material Safety Data Sheet (MSDS). If there is no information and you have questions, contact the product manufacturer.
- Tell your physician, pharmacist, dentist and veterinarian that you are allergic to ethylenediamine. Ask for preparations that do not contain ethylenediamine or related substances.
- Wear protective gloves. Heavy-duty gloves made of natural or synthetic rubber, or vinyl, may be good for working with many potential sources of ethylenediamine.
- If you think that you contact ethylenediamine 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 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:

- **Ethylenediamine dihydrochloride** or 1,2-ethanediamine, dihydrochloride; chlorethamine; dimethylenediamine dihydrochloride; ethylenediammonium chloride; 1,2-diaminoethane dihydrochloride

Ethylenediamine dihydrochloride -related substances that you may also react to:

- Diethylenetriamine (DETA)
- Triethylenetetramine (TETA)
- Dipropylenetriamine (DPTA)
- Tetraethylenepentamine (TEPA)
- Aminophylline
- Piperazine

Related substances to which you may react:

- Aminophylline
- Buclizine
- Chlorcyclizine
- Cyclizine
- Hydroxyzine hydrochloride
- Epoxy resin catalysts (ethylenediamine and chemically related amines such as diethylenediamine, dipropylenetriamine, triethylenetetramine, tetraethylenetetramine, trimethylhexamethylenediamine)
- Meclizine
- Piperazine-based antihistamins
- Promethazine hydrochloride (HCl)
- Tripeleminamine

*For additional information about ethylenediamine visit the United States National Library of Medicine online at www.nlm.nih.gov. The lists above are brief. 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.



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For further information about contact allergies and patch testing, visit www.truetest.com.