

## 14 Epoxy Resin – Patient Information

Your T.R.U.E. TEST indicates that you have a contact allergy to epoxy resin. Epoxy resin 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.

Epoxy resins are found in two-component adhesives, coatings, paints and composite materials with a curing agent. These epoxy resins are commonly found in industry and at home.

### Where is epoxy resin found?



*At work*, you may find epoxy resin in and around:

- Production of molds, dies and models
- Two-component paints and adhesives
- Electron microscopy embedding media
- Art and sculpture materials
- Manufacture of epoxy composite products such as tennis racquets, skis, and circuit boards
- Lightweight equipment and rotor production
- Flooring, floor sealers and coatings
- Protective finishes, coverings and coatings
- Dental restoratives and epoxies

The most common epoxy exposure is from 2-component adhesive. Epoxy resin is also found in adhesive tapes, surface coatings, paints, putties and inks. It may be found in encapsulation of electrical parts and in some dental bonding agents.

Epoxy can be added to other plastic materials e.g. some vinyl plastic products such as eyeglass frames, vinyl gloves, handbags and plastic necklaces.

Industrially epoxy resin is found in product finishing and repair such as floor, wall, road and bridge coatings, appliance finished, automotive primers and flame-retardant. Reactions may occur through exposure to varnishes, laminates, paints, tool handlers, die-castings, model making as well as through materials used by artists and sculptors.

Note: Only resin and hardener, the two components of uncured epoxy are allergenic. Cures (hardened) plastic is seldom a problem.



*At home*, you may find epoxy resin in and around:

- Two-component paints, glues and adhesives
- Model and mold construction
- Flooring, floor sealers and coatings
- Protective finishes, coverings and surface coatings
- Art and sculpture materials
- Fiberglass repair

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### How can you avoid epoxy resin?

- Do not touch or handle uncured epoxy resin and avoid breathing fumes. Only use products that do not list epoxy resin or related chemicals on the label, ingredients list or Material Safety Data Sheet (MSDS). If there is no information, contact the product manufacturer or visit their website.
- Tell your physician, pharmacist and dentist that you are allergic to epoxy resin. Ask for products that do not contain epoxy resin or related substances.
- If you must work with epoxy resin, use Silvershield®/4H® glove protective gloves that are chemically resistant. For hobby and detail work, use tools rather than bare hands when working with epoxy resin.
- If you think that you contact epoxy resin at work, ask your employer for a MSDS or manufacturer information on the product(s). Talk to your employer about using a different product or wearing chemically resistant 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.

- **Epoxy resin** or diglycidyl ether of bisphenol A; diglycidyl bisphenol A; diomethane diglycidyl ether; diglycidyl diphenylolpropane ether; 2,2-bis(4-glycidylphenoxy)propane; Araldite®; 4,4'-isopropylidenediphenol diglycidyl ether, DGEBA epoxy resin, Epichlorohydrin, 4,4'-Isopropylidenediphenol-epichlorohydrin

You may also react to substances related to bisphenol A based epoxy resins such as:

- Bisphenol A-glycidyl methacrylate
- Epoxy resins with diglycidyl ethers of bisphenol F
- Tosylamide epoxy resin

### What are some products that may contain epoxy resin or related substances?\*

- Scotch® Super Strength Adhesive
- Evercoat® Everfix Epoxy Resin
- Concesive® Epoxies (2-component)
- Loctite® Metal/Concrete Epoxy
- Evercoat® Table Top Epoxy
- ChemRex® Concrete Primer CX85 Resin

### What products do NOT contain epoxy resin or related substances?\*

- Scotch-Weld™ Urethane Adhesive
- Scotch® Quick Dry Adhesives
- Fluka® Durcupan embedding agent
- 3M™ Marine Adhesive Sealant 5200
- Loctite® Super Glu for all plastics

\*For additional information about products that might contain epoxy resin 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.