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Allergic Contact Dermatitis, Part 2

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Allergen	Common Sources	Other Information
Colophony (rosin, abietic acid)	Topical products including cosmetics and personal care products; rosin for stringed instruments and dance shoes; ostomy appliances and wound care materials; coatings, sealants, adhesives; sports equipment (eg, handles, grips, wax)	Found in the sap of coniferous trees (ie, pines, firs, cedars, junipers)
Diazolidinyl urea	Topical products including cosmetics, personal care products, and detergents	Antimicrobial formaldehyde-releasing agent; can cross-react with other formaldehyde-releasing agents (eg, DMDM hydantoin, imidazolidinyl urea, tris[hydroxymethyl]nitromethane, quaternium-15, bronopol)
Disperse blue dyes	Dark blue, black, purple, or brown fabrics; fabrics that are pure polyester or pure acetate	Can cross-react with paraphenylenediamine and disperse blue dye 124; allergen of the year 2000 ^a
DMDM hydantoin	Topical products including cosmetics and personal care products	Antimicrobial formaldehyde-releasing agent; can cross-react with other formaldehyde-releasing agents (eg, diazolidinyl urea, imidazolidinyl urea, tris[hydroxymethyl]nitromethane, quaternium-15, bronopol)
Epoxy resin (bisphenol A diglycidyl ether)	Adhesives, tapes, coatings, sealants, paints, putties, some dental bonding agents, art and sculpture materials	Can cause occupational asthma
Ethylenediamine dihydrochloride	Industrial products including solvents, textile resins, epoxies, antifreeze, and metal chelators	Can cross-react with aminophylline, hydroxyzine, meclizine, promethazine, other piperazine-based medications (eg, cetirizine, levocetirizine, trazodone, buspirone, sildenafil)
Formaldehyde	Topical products including cosmetics and personal care products; smoke from tobacco, cigarettes, wood, coal, or charcoal; wrinkle-free agents for clothing	Can cross-react with formaldehyde-releasing agents (eg, diazolidinyl urea, DMDM hydantoin, imidazolidinyl urea, tris[hydroxymethyl]nitromethane, quaternium-15, bronopol)
Fragrance mix	Topical products including shampoos, conditioners, cosmetics, hand soaps, and toothpastes; perfumes and colognes; food and beverages	Contains geraniol, cinnamaldehyde, hydroxycitronellal, cinnamyl alcohol, α -amylcinnamaldehyde, isoeugenol, eugenol, oakmoss; can cross-react with balsam of Peru; patients should look for fragrance free vs unscented on product labels; allergen of the year 2007 ^a
Gold sodium thiosulfate	Products or medications that contain gold including jewelry, dental implants, medical implants, some treatments for rheumatoid arthritis, and gold-plated products	Common cause of eyelid dermatitis; allergen of the year 2001 ^a

^aAllergen of the year is awarded by the American Contact Dermatitis Society.

Practice Questions

- 1. Which of the following is *not* a component of fragrance mix?**
 - a. abietic acid
 - b. α -amylcinnamaldehyde
 - c. geraniol
 - d. hydroxycitronellal
 - e. oakmoss

- 2. A patient is referred for patch testing for suspected allergic contact dermatitis and is found to have positivity to disperse blue dye 106. The patient should avoid all of the following *except*:**
 - a. black-colored clothing
 - b. pure acetate clothing
 - c. pure polyester clothing
 - d. purple-colored clothing
 - e. red-colored clothing

- 3. A patient with a documented contact allergy to ethylenediamine dihydrochloride should avoid all of the following systemic medications *except*:**
 - a. aminophylline
 - b. disulfiram
 - c. hydroxyzine
 - d. meclizine
 - e. promethazine

- 4. Formaldehyde can cross-react with all of the following *except*:**
 - a. diazolidinyl urea
 - b. DMDM hydantoin
 - c. imidazolidinyl urea
 - d. para-aminobenzoic acid
 - e. quaternium-15

- 5. Colophony can be found in all of the following trees *except*:**
 - a. cedars
 - b. firs
 - c. junipers
 - d. maples
 - e. pines

Fact sheets and practice questions will be posted monthly. Answers are posted separately on www.cutis.com.