

Chloroxylenol

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CHLOROXYLENOL (p-chloro-m-xyleneol) is a chlorinated phenolic compound commonly used for antimicrobial activity in soaps, cosmetics, topical medications, and antiseptics. It has been reported to cause allergic contact dermatitis, most often affecting the hands, in association with the use of medicated petroleum jelly, electrocardiography paste, machine coolants, antiseptics, and antimicrobial soaps.¹ A retrospective analysis of more than 3,000 consecutively patch-tested patients in the United Kingdom found that 0.4% had positive reactions to chloroxylenol, with a corresponding relevance of 80%.² The North American Contact Dermatitis Group (NACDG) found that of more than 4,000 patients tested from 2001 to 2002, 0.6% had positive reactions to chloroxylenol, with possible or probable relevance in 71% of cases.³ This appreciable reactivity, combined with high relevance, frequent lack of pretest suspicion, and widespread exposure via antimicrobial soaps, has led to the inclusion of chloroxylenol in the British standard series and the NACDG standard series, in which it is used at a concentration of 1% in petrolatum.² Chloroxylenol is not a component of the European Standard series or the T.R.U.E. Test.

The use of chloroxylenol in over-the-counter products increased after the withdrawal of hexachlorophene-based antiseptics from nonprescription use. It has some activity against methicillin-resistant *Staphylococcus aureus* and continues to be used in hand soaps and in disinfectants in the health care industry.

Chloroxylenol can cross-react with the structurally related chlorocresol, which is used as a preservative in

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Allergen Avoidance provides clinicians with high-quality up-to-date practical information to supply to patients about specific contact allergens.

cosmetics and medications, including some preparations of betamethasone cream.

References

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What is it?

Chloroxylenol is an antibacterial compound used as an antiseptic and preservative.

Synonyms for chloroxylenol include para-chloro-meta-xyleneol (PCMX), 4-chloro-3,5-xyleneol, and 4-chloro-3,5-dimethylphenol.

Where is it found?

Chloroxylenol is most commonly found in (1) antibacterial soaps in health care facilities and restaurants, (2) products used as antiseptics and disinfectants, (3) cosmetics, and (4) topical (externally applied) medications. The following is a list of products that may contain chloroxylenol:

Cosmetics	Medications	Industrial Products
Mascara	Antifungals	Soaps in restaurants and health care facilities
Foundation	Otic (ear) drops	Antiseptics, disinfectants, and soaps
Foot creams and powders	Acne preparations	Cutting fluids and coolants used in metal machining
Hand creams	First-aid sprays	
Hair removal wax	Antibacterial petroleum jelly	
Shampoo	Betamethasone creams that contain a cross-reacting compound called chlorocresol	
Conditioner		

How can it be avoided?

Care must be taken to read product labels and to avoid products whose labels list chloroxylenol or any of the synonyms listed above among their ingredients. It is also important to avoid chlorocresol (para-chloro-meta-cresol), another preservative that can cross-react with chloroxylenol.

Your dermatologist may give you a list of products that are safe to use. Be careful to purchase only products with exactly the same name and manufacturer as those on your list.