



## **PATIENT INFORMATION LEAFLET: caine mix III**

**Your patch test shows that you have a contact allergy to:** caine mix III containing benzocaine, tetracaine and cinchocaine

### **Synonym(s):**

- Benzocaine: ethyl (4-) aminobenzoate, para-aminobenzoic acid ethyl ester.
- Tetracaine: tetracaine hydrochloride, amethocaine.
- Cinchocaine: dibucaine hydrochloride, cinchocaine hydrochloride.

### **Definition:**

Benzocaine, tetracaine and cinchocaine are used as local anaesthetics. Caines consist of three components: a lipophilic (aromatic) group, an intermediate chain linkage and a hydrophilic (amine) group. Depending on their intermediate chain, they are classified into two major groups: esters (e.g. benzocaine, tetracaine, procaine) and amides (e.g. cinchocaine, lidocaine, bupivacaine).

### **Use and occurrence:**

- in topical preparations, including sore throat sprays, cough syrups and lozenges, antitussives, astringents and oral antibacterial preparations.
- in preparations used for haemorrhoids, pruritus ani and vulvae.
- in anaesthetic eye and ear drops.
- in gels for cold sores, toothache and denture irritation
- in pharmaceutical products used for symptomatic treatment of itching and stinging of cuts, burns, sunburn and insect bites.
- in topical products for calluses, corns, warts and fungal infection.
- in condoms (lubricant).
- in injectable local anaesthetic agents (for subcutaneous use).

### **Remarks:**

- Cross-reactivities are common within both the ester and amide group, but cross-reactivity between esters and amides does not occur.

- Esters are metabolized to p-aminobenzoic acid (PABA). About 25% of benzocaine-sensitive individuals are also sensitive to paraphenylenediamine (PPD used in e.g. hair dyes), sulphonamides (antibacterial drugs), and sunscreen agents based on PABA esters.

*Disclaimer: Always check your products as these lists can never be complete and ingredients change.*