

Technology Patent application

Compositions comprising chlorhexidine and a depigmenting complex

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Field of the Invention

The invention relates to oral compositions intended for application on mucosal tissues, comprising **chlorhexidine** and a **depigmenting complex** consisting of **lipoic acid, ascorbyl palmitate** and **EDTA**.

The technology concerns the use of a complex able to **inhibit tooth pigmentation** induced by chlorhexidine and its salts.

Background

Chlorhexidine is an antiseptic widely used in dentistry for the control of bacterial plaque and the prevention of oral infections.

However, one of the most well-known effects of its prolonged use is tooth pigmentation.

This discoloration is caused by the interaction of chlorhexidine with the compounds present in the saliva and diet, which leads to the formation of stains on the tooth surface.

Technical Finding

It has been found that the pigmentation induced by chlorhexidine and its salts can be effectively inhibited by using a complex consisting of lipoic acid, a chelating agent and ester of ascorbic acid.

The incorporation of a depigmentation complex comprising lipoic acid, ascorbyl palmitate, and EDTA into a disinfecting formulation containing chlorhexidine, inhibits tooth pigmentation.

Experimental Evidence

A study, conducted on 40 volunteers, predisposed to dental yellowing, compared the efficacy of a product containing a depigmenting complex, proving the product including the formulation of the invention to be more effective than a formulation without depigmenting complex.