

# COSSMA

COSMETICS  
SPRAY TECHNOLOGY  
MARKETING



## Marketing

New ingredients for the products of tomorrow

## Market survey

The world of packaging at a glance

## Ingredients

Anti-acne formulation using pistachio resin

## Social media

Boost turnover with product recognition



## VIP of the Month

Dr. Daniel Schmid on pistachio resin to fight impure skin

Dried resin from the pistachio tree



## An active substance from pistachio resin to combat ... ... impure skin

Dr. Daniel Schmid of Mibelle presents an active ingredient obtained from pistachio resin that controls excess sebum production, open pores, as well as the formation of comedones.

Impure skin is not only a problem in puberty, many adults face this problem. One reason for impure skin is the increased production of sebum: the pores become more open, the skin appears greasy and shiny. If the pore duct is blocked by hyperkeratinization a blackhead (comedo) is formed. In the sebum plug acne bacteria multiply and their metabolites lead to an inflammation.

Mastix, the resin from the wild pistachio tree, is used to develop an active cosmetic ingredient to treat impure skin. In clinical studies it was demonstrated that the opening of the pores was reduced and that the formation of comedones and shiny skin was inhibited.

### The characteristics of mastix

Mastix is the resin from the *Pistacia lentiscus* tree – the so-called wild pistachio tree – which belongs to the same family (Anacardiaceae) as the popular pistachio nut producing tree *Pistacia vera*.

Mastix trees are growing in the Mediterranean and on the Canary Isles. The resin, however, is obtained

only from the Greek island of Chios. The special micro-climate, and special soil on this island stimulate the trees to produce more resin than elsewhere. There are many known applications for the dried resin, such as a coating for oil paintings, as a spice in pastries, as an additive in chewing gum and as an antiseptic in the treatment of minor wounds. Various pharmaceutical properties of mastix have been scientifically proven. Mastix extracts have an antibacterial and antimycotic effect, they inhibit inflam-

mation, act against *Helicobacter pylori* and various cancer cells.

Mastix is an oleo-resin, a blend of resin acids and ethereal oil. Terpene compounds are the dominant components, mainly triterpene acids, neutral triterpenes and monoterpenes.

**PoreAway** has been developed for the treatment of pores. The mastix oleo-resin is not water soluble but its components are stabilised in a nano-emulsion. To this end the resin is homogenised in glycerine, alcohol and lecithin.

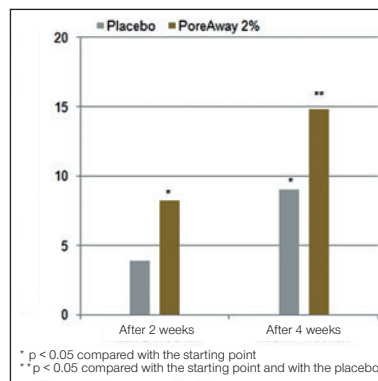


Fig. 1: Smoothing of the skin area with large open pores in %

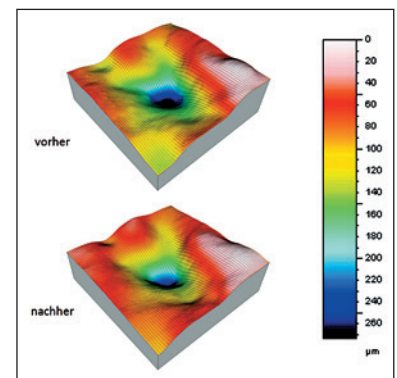


Fig. 2: Reduction in the profile of the pore opening

## Reducing the size of pores and comedones

In an initial study a cream with 2 percent PoreAway was tested for its efficacy in reducing open pores. Twenty women with skin having large open pores applied the test product to their cheeks on one side. The placebo cream, with no active, was applied to the other cheek. Before the first application of the creams, and after 2 and 4 weeks, silicon replicas of skin areas having large open pores were produced. The relief profile of the imprints was examined using the Primos system. A marked smoothing of the skin after 4 weeks of treatment with the PoreAway cream was clearly visible (s. fig. 1). The imprints of the skin's structure showed a clear reduction in the size of the pores (s. fig. 2). The Primos data were additionally evaluated in terms of the total surface area of the pores, with point-shaped pores penetrating deeply from the basic skin structure being separated. A significant reduction in the overall surface area of the pores was shown.



*Plantation of mastix trees on the Greek island of Chios*

In a second study the same creams were tested on women from Thailand who had greasy skin, almost tending towards acne. 44 volunteers between the ages of 30 and 52 were split into two groups with one group using the PoreAway cream and the other group using the placebo cream. The number of open and closed comedones, and the shiny appearance of the face, were evaluated by dermatologists before the first application of the creams and after 4 weeks treatment. After using the PoreAway cream the number of both open and closed comedones was significantly less than when the treatment began. The improvement in open comedones was, in comparison with the placebo cream, quite marked. The shine on the skin was, in the group who used the PoreAway cream, clearly less than it was at the beginning of the study. In the placebo group no improvement was seen.

The new PoreAway active ingredient is highly suitable for cosmetics formulations aimed at improving the surface of the skin, reducing the size of pores and producing a much less shiny look.



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