# CHITOSAN COMPOSITION USE IN COSMETIC PRODUCTS



## **Invention Definition**

The invention pertains to the creation of a chitosan-based composition combined with probiotic bacteria, which is suitable for application in the cosmetics industry. This composition includes not only chitosan and probiotic bacteria but also essential oils and stabilizers. The composition can be utilized either as a raw material in cosmetic products or as a standalone product.



**Applicant** 

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#### **Benefits**

- The composition of the invention possesses antifungal, antibacterial, and antioxidant properties, effectively preventing acne formation by regulating the skin's flora.
- Serving as a suitable raw material for serums, gels, soaps, creams and other cosmetic products, the composition delivers beneficial and impactful outcomes, such as moisturization, anti-aging effects, skin repair and spot removal.
- By incorporating essential oils (such as oregano oil, thyme oil, tea tree oil, juniper oil, sage oil, lavender oil, marigold oil, and rosehip oil) into the composition, the products acquire unique properties that further enhance their efficacy.

#### Areas of Use

The composition is well-suited for utilization as a raw material by manufacturers in the personal care and skin care product industry. Additionally, it can be employed as a

stand-alone serum by incorporating it into a separate formulation.





#### Market Information

According to projections, the cosmetics sector is expected to reach a market size of \$415.3 billion by 2028, exhibiting a compound annual growth rate (CAGR) of 5%. Within the cosmetics sector, skin care products are anticipated to reach \$145.8 billion by 2028, with a CAGR of 5.5%. The Asian countries demonstrate significant market potential in this industry.

### **Target Market**

The target clients for this composition primarily encompass companies involved in the production of cosmetics, with a specific focus on those operating within the specified NACE Code. Furthermore, companies supplying raw materials for personal care and skin care products can also be considered as valuable target clients for this product.

Nace Code	Activity
20.42	Manufacture of perfumes, cosmetics, and personal care products

#### **Commercialization Exceptions**

The aim is to facilitate technology transfer to the identified target clients through patent licensing or transfer. This technology transfer will be supported by industry-industry cooperation projects.

As the invention is currently undergoing examination report process, it is eligible for the TUBITAK 1702 Patent-Based Technology Transfer Support Program. In the event of a successful technology transfer, the client organization will have the opportunity to recover 25%-40% of the licensing / transfer fees.

