



Anhydrous Beauty: Innovative Waterless Skincare Formulation

SP Singapore
Polytechnic

Technology Licensing Opportunity

Technology Overview

Sustainability in beauty is increasingly becoming a priority across the globe and this green consumerism trend is driving more cosmetics companies to seek natural, clean and environmentally friendly ingredients, packaging and green products. This expectation is pushing beauty brands towards new sustainable innovation, such as waterless beauty, upcycling, carbon neutrality and reusable or refillable packaging solutions to meet the demands from the environmentally conscious generation – and this has been emphasised due to the pandemic.

Our technology aims to create a moisture-rich cosmetic in waterless form. This revolutionary concept enables personalization formulation to produce moisture-rich powder that turn into a spreading cream and/or serum easily upon application. The waterless formulation can be readily customized and adapted to suit the specific needs of an identified target market. We have developed a range of customizable cosmetic formulations using natural, organic and sustainable ingredients to support sustainability effort and reduce carbon footprint by decreasing water consumption, option for refills by cutting down on use of plastic packaging materials.

Potential Applications

Environmentally and personalized skincare product moisture-rich powder formulation that turns into:

- Cream
- Serum

Commercialization / R&D Opportunities

- ✓ Ready for commercialization
- ✓ Looking collaborators for further development / to develop new applications
- ✓ Available for licensing
- ✓ Accepting business plans from interested parties

Intellectual Property -

- Know-How

Technology Features & Specifications

Environment

- Reduce pollution by reducing usage of plastic packaging
- Promotes cruelty-free and environmentally friendly product
- Use of natural ingredients with higher concentration

Cosmetic Manufacturer

- Customizable formulation for clean, green products development
- Cold process – lower energy consumption used in production
- Wider choice of recyclable and reusable packaging material beside plastic
- Longer shelf stability with use of natural ingredients

Consumer

- New appearance and sensorial experience for their day to day use products
- High quality (concentration) products that are sustainable
- Convenient for travel in smaller, compact packaging in their carry-ons
- No issues with liquid leakage
- Eco-conscious lifestyle through smaller carbon footprint products usage
- Moisture-rich waterless formulation that transform easily to cream/serum upon application
- Non-oily nor tacky feel during application

Brand owner

- New concept to introduce into consumer market.
- Supports latest beauty trend of clean, green and sustainable concepts and ingredients

Unique Value Proposition

- This technology can be employed in the skin care, personal care, color cosmetic and pharmaceutical topical product. Products that can be marketed include personal care and skin care range, such as skin serum, cream foundation, ampoule, blusher, moisturizers, lotions, etc.
- According to Statista, there will be 3.5 billion people in the middle-class segment in Asia by 2030 with an estimated global spending amounting to USD3.5 billion. The Asian consumers are increasingly demand more sophisticated products and services as the growing middle class becomes more affluent. The Singapore skin care market is projected to grow significantly in the coming years, driven by the increasing demand for natural and organic products. The market is expected to generate revenue of US\$352.14 million in 2025, with a growth rate of 2.16% annually from 2025 to 2030.

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