

Powder Gentle to Your Skin

Development of “Titanium Dioxide Coated with Phospholipid”

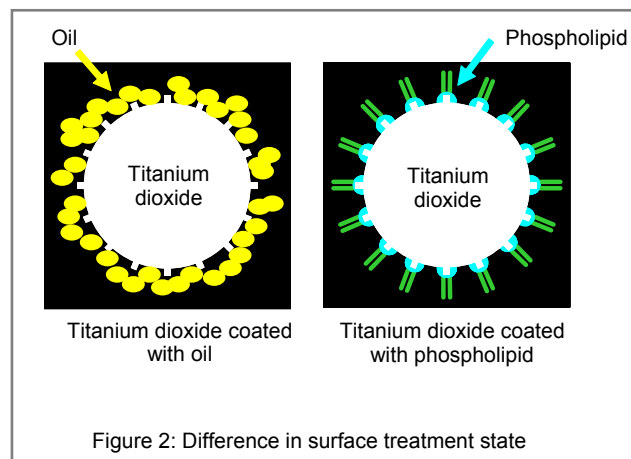
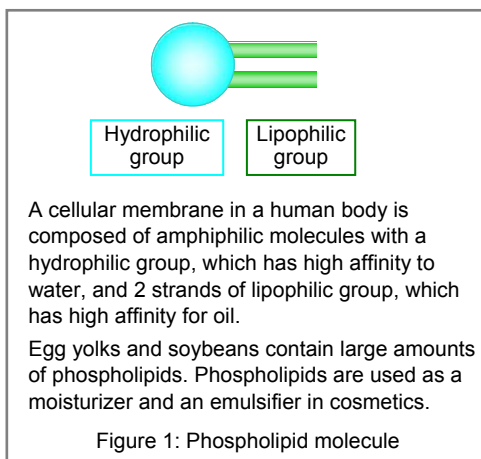
KOSÉ has developed a powder that is even gentler to your skin through the use of a phospholipid coating on the surface of titanium dioxide (TiO₂) in cosmetics.

Titanium dioxide is used frequently in foundations and sunscreen cosmetics. It is an effective powder used as a white pigment and for UV protection. It also has a good ability to conceal. Thus, even a small amount blended into a foundation can increase its ability to conceal, covering discolorations and uneven skin tone. Titanium dioxide also can promote the oxidation of sebum on the skin. Therefore, titanium dioxide needs to be coated with various oils. Since a large amount of oil is necessary to fully coat the titanium dioxide surfaces, the dispersibility of the powder decreases. This decreased dispersibility leads to thickening and non-lasting makeup of foundation, thereby restricting the formulation.

Phospholipid (Fig. 1) is highly affinity with the skin, and it is a highly effective ingredient for skin care. KOSÉ has been involved for a long time in the formulation research utilizing this ingredient’s characteristic. KOSÉ has developed many cosmetics blended with phospholipids, including the serum “Moisture Liposome” which blends multilamellar vesicle “liposomes.”

Our study has led to the development of “titanium dioxide coated with phospholipid,” a powder which would lower the strain on the skin by phospholipid coating on titanium dioxide. The surface of this new powder is coated with phospholipid more strongly compared to previous titanium dioxide coated with oils (Fig. 2). When the new powder is applied onto the skin, it does not easily oxidize sebum on the skin. In a use test, this new powder was continuously applied to the skin for 7 days, and the stratum corneum cells on the skin surface maintained their normal state. The moisture of the skin was also maintained.

“Phospholipid coated titanium dioxide” maintains the ability of the titanium dioxide to conceal but still feels smooth on the skin.

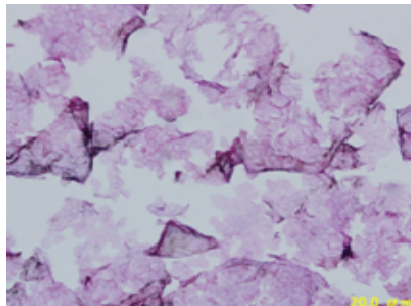


On September 16th, KOSÉ will launch a product blended with this new powder “Cosme Decorte Vital-Science Premium Powder Foundation Reality.” It is a light touch foundation with superior ability to cover the skin but without noticeable strain on the skin.

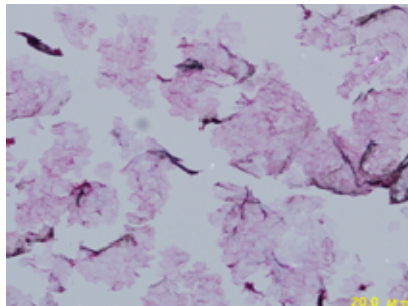
Data

Skin condition after 7 days of use

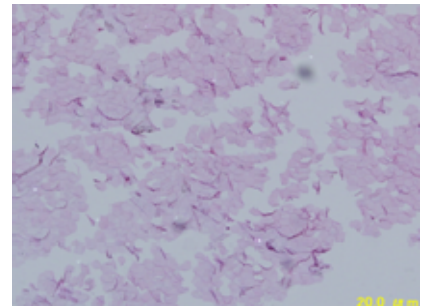
The stratum corneum on the skin surface were collected with adhesive tape and the cells were observed under a microscope.



Application of untreated titanium dioxide



Application of titanium dioxide coated with oil



Application of new titanium dioxide coated with phospholipid

Changes in moisture in the stratum corneum

