

Shiseido Develops a New Spherical Pearl Luster Pigment that Diminishes the Appearance of Lip Wrinkles and Lines by High Light-Diffusing Effects

Shiseido Co., Ltd. has developed a totally new spherical pearlizing agent applying its powder compound technology^{*1} to diminish the appearance of lip wrinkles and lines, which is a leading concern when using lipstick. The shape is completely different from existing plate-shape pearlizing agents, whereby Shiseido has verified that a spherical shape makes light reflect evenly, giving lips a radiant shine and making lip wrinkles and lines less noticeable.

Among the main ingredients of lipstick, while a pearlizing agent is used to bring out luster and brightness via a light-reflective effect, the newly developed spherical pearlizing agent has a two-layer structure with a pearlizing layer evenly laminated around spherical powder as the core (Figure 1). Developing a spherical pearlizing agent that casts a vivid red shine the same as a plate-like pearlizing agent has been difficult in the past. However, Shiseido succeeded in developing such a base ingredient by combining various compound technologies, including filtering measurement technology to make a uniform particle size of spherical powder as the core along with technology to evenly laminate the particles of the pearlizing layer.

*1 Powder compound technology: Technology to coat particles on the surface of spherical powder with a thin film to form a pearlizing layer.

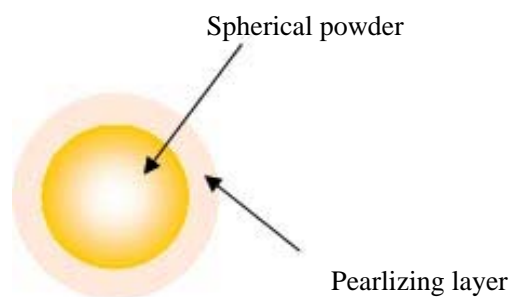


Figure 1. Compound spherical-shape pearlizing agent

Desired Functions for Lipstick

Shiseido conducted a survey of women in their 20s to 50s to ascertain “what they want out of lipstick” (April 2008, N=500 females). The results obtained indicated a high awareness regarding such matters as “lips that look full and plump” and “less noticeable lip wrinkles and lines ” in addition to matters related to texture and color such as “shine and moisture” and “suitableness.” Regarding “concerns when using lipstick,” the survey results likewise showed that matters related to lip wrinkles and lines ranked high.

However, because the areas of lips where such wrinkles and lines appear are very active in terms of movement, it is very difficult to make these wrinkles and lines less noticeable by applying existing technologies in comparison with skin wrinkles and lines. Also, spherical powder, which is formulated in foundations for such purposes as correcting skin unevenness, is not effective enough as an applicable substance to conceal wrinkles because within the oil base for lipsticks and other cosmetic products, the light refraction index is similar; therefore, light diffusion is weak.

In contrast, existing plate-like pearlizing agents that are widely used have the expected effect of making lips shine brightly due to the fact of having a vivid color tone and excellent brilliance and luster. On the other hand, a substance that has a plate-like shape holds the direction of light being reflected and emphasizes the difference in brightness of uneven areas, thereby having the tendency to make these wrinkles and lines more easily noticeable.

Development of Spherical Pearlizing Agent

Shiseido focused on developing a new base ingredient that maintains color effects from existing plate-like pearlizing agents and appears to diffuse and reflect light in all directions by making the shape of the pearlizing agent spherical. Shiseido also developed a technology to coat high-refractive-index powder with high light-diffusing properties as a pearlizing layer, while keeping its crystal form and thickness, on the surface of spherical powder whose particle size is uniform.

As a result, Shiseido has successfully developed a totally new pearlizing agent with vivid color effects and enhanced diffusion and reflective effects (Figure 2, patent approved). The newly developed spherical pearlizing agent is able to naturally diminish the appearance of deep lip wrinkles and lines due to the development of a high light diffusion effect in oil content. Moreover, the compound powder also has the combined effects of being able to make lips look beautiful by heightening the contrast of areas with wrinkles and lines resulting from brilliant color and providing color with a hint of red luster.

Shiseido will apply this technology to future lipstick products.

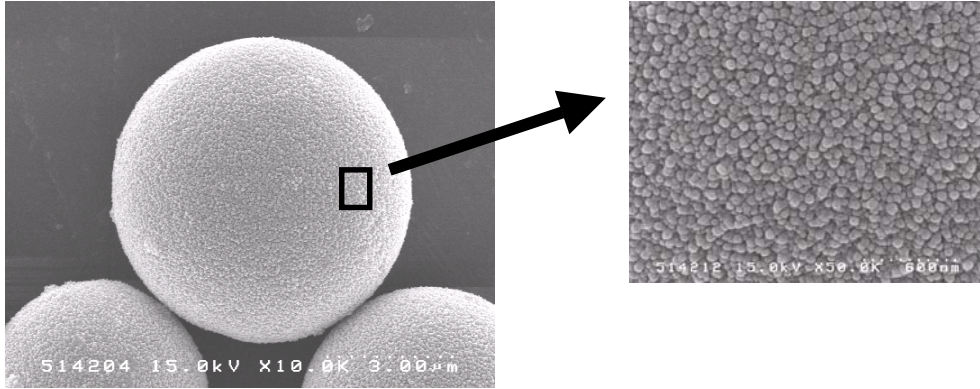


Figure 2. Pearlizing agent (left) and surface condition (right)