

<Abstract>

Plate powders with large particle size are generally said to have luster and transparency. Yamaguchi Mica has developed GFA-50 by classifying gross mica, which is obtained by our original wet milling process with mild milling, into only large particle size, and then cutting the microparticles to select only clearer mica. Therefore, we applied GFA-50 to actual make-up cosmetics. As a result, we found a characteristic soft luster and reddish transparency. We expect that by formulating GFA-50, the cosmetics with more improved texture will be developed.

<Key Word>

gross mica, large particle, make-up, soft luster, transparency

<Introduction>

We have offered gloss mica series such as SA-310 and SA-350 with high luster by wet milling mica in a milder process. However, the conventional mica contained small particles of less than 10 microns, which affected the gloss and transparency of the mica. Therefore, we developed the GFA-50 by reviewing the milling and classification process and developing a method to obtain only large-diameter mica particles.

In this technical note, we report the evaluations of the feeling and finish for make-up cosmetics containing GFA-50 in order to develop formulations that take advantage of GFA-50's characteristics.

<Methods>

1. Loose Powder Preparation

Loose powder containing 25% GFA-50 was prepared. Loose powders without GFA-50 and with 10% pearl pigment were also prepared for comparison.

2. Evaluation of Loose Powder

The gloss was observed by applying to the hemispheres and dolls of the artificial skin (A makeup base was used for loose powder application.). Transparency was performed by films coated with loose powder using lacquer.

3. Confirmation with Powder Foundation

Powder foundations containing 0%, 5%, and 10% GFA-50 were prepared and compared by applying to the dolls and inner arm. In addition, the state of the application was observed by skin scope.

<Results>

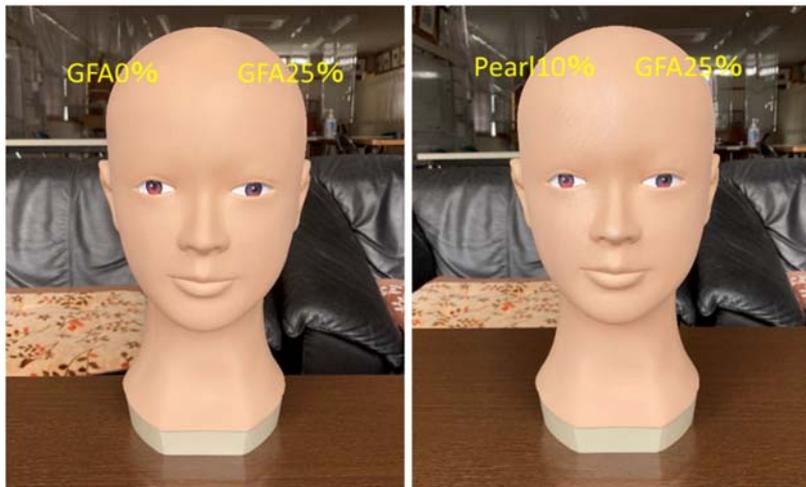
1. Observation by Applying to Hemispheres



Loose powder with GFA-50 confirmed the brightness at the top and the shadows at the area corresponding to the face line.

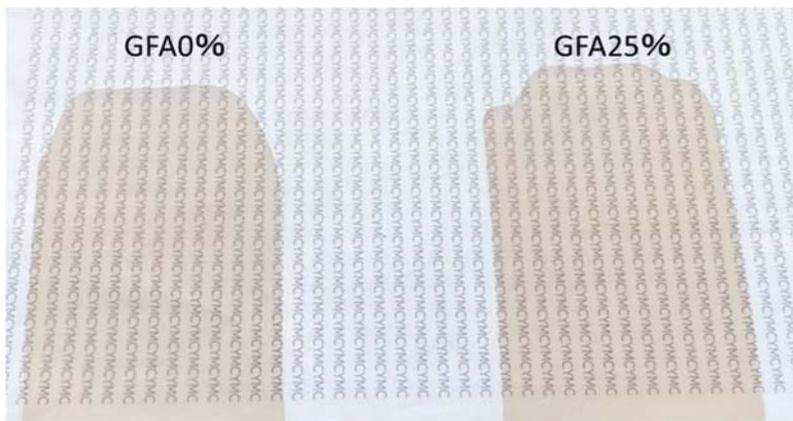
2.Observation by Applying to Dolls

Loose powder with GFA-50 had light shading characteristics on the cheeks and face lines. Also, its light was soft, unlike the metallic light of pearl pigments.



3.Transparency Evaluation

In the loose powder containing GFA-50, the letters were observed clearly through its coating. In addition, a slight reddish tone was observed, indicating the possibility of producing healthy skin.



4.Evaluation with Powder Foundation

In the same way as the loose powder, soft light and shade could be observed on the dolls with powder foundation applied. On the inner arm, the foundation without GFA-50 resulted



in a white matte finish, while the foundation with GFA-50 resulted in a transparent finish that gave the appearance of bare skin. These effects were attributed to the GFA-50 dotted on cristae cutis, as observed by skin scope.

<Conclusion>

GFA-50 is a large particle size mica with few small particles. Therefore, GFA-50 has a soft, natural luster, slightly reddish color tone, and transparency derived from the plate-like shape of mica. In base make-up cosmetics, these characteristics become visible especially when blended at around 5%, and it is expected to produce make-up finishes with both a three-dimensional effect and a bare skin look.