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Sekisui Kasei Co., Ltd. (Head Office: 2-4-4 Nishi-tenma, Kita-ku, Osaka, President: Masato Kashiwabara) has worked on AI for the development of formulations for skin care gels in the cosmetic field in order to quickly respond to diversifying customer needs, in collaboration with Fujitsu Limited (Fujitsu), Fujitsu FSAS Inc., and Ridgelinez Limited, and has started offering gel products based on the new development style.

ST-gel™ AI-FIT Developed

1. Background

"ST-gel" is widely used as a mask material for skincare that is gentle on the skin. Sekisui Kasei has commercialized its own cosmetic masks that have high adhesion and provide continuous moisturization to the skin, and has also provided support for OEM. Conventionally, sensual expressions such as "gives fresh and moist feeling" are used to describe the feeling of use in the evaluation of cosmetic masks, so it took time to match customer demands with formulation development, which became a development issue.



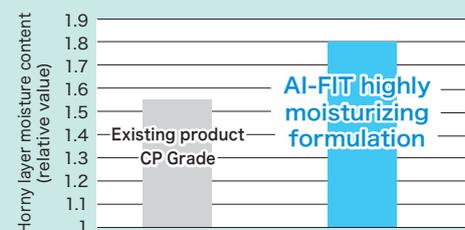
Cosmetic mask usage example

2. Overview

To solve these problems, Sekisui Kasei focused on the quantification of sensory evaluation and developed a cosmetic mask formulation proposal system using Fujitsu's AI technology "Zinrai." Through these efforts, Sekisui Kasei was able to quantify sensory evaluations, which made it possible to quickly respond to a wider variety of needs.

As an example, it has been quantitatively clarified that the moisturizing sensation is maintained and the moisturizing effect (horny layer moisture content) is improved compared to a conventional product, as a result of deriving a formulation for a highly-moisturizing property, which is especially demanded by customers. Sekisui Kasei has currently started to provide samples, which are popular with customers because they can actually experience the effects.

Quantitative evaluation of highly moisturizing products



Measurement method

- ①The moisture content of the skin is measured with a corneometer as a blank.
- ②Each pack is applied for 10 minutes.
- ③The moisture content is measured 1 hour after removing the pack.
- ④The relative value is calculated when the condition before the pack is applied (the value measured in (1)) is made 1

3. Future development

Moving forward, Sekisui Kasei will raise awareness in the "ST-gel AI-FIT" as a system that can quickly respond to customer requests, promote the lineup of products derived from it, and provide cosmetic gel masks that support various kinds of usage, and work on various forms of commercialization.

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