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<u>Compostable materials BioPBS[™] and AZ-1 adopted for outer pouch of brand SHISEIDO's</u> <u>sunscreen outer bag</u>

Mitsubishi Chemical Corporation Futamura Chemical Co., Ltd.

Mitsubishi Chemical Corporation (Headquarters: Chiyoda-ku, Tokyo, President: Masayuki Waga, hereinafter "Mitsubishi Chemical") and Futamura Chemical Co., Ltd. (Headquarters: Nagoya City, Aichi Prefecture, President: Yasuo Nagae, hereinafter "Futamura Chemical") have announced that Mitsubishi Chemical's biodegradable resin BioPBS[™] and Futamura Chemical's cellulose film AZ-1 are to be used for the outer pouch of brand SHISEIDO's stick-type sunscreen Clear Suncare Stick, launched in May 2021.

SHISEIDO Clear Suncare Stick is the first product for which Shiseido Company is using the compostable film for its outer pouch. Mitsubishi Chemical's BioPBS[™] is used for the inner surface (sealant) and the zipper part of the outer pouch, and Futamura Chemical's AZ-1 is used for the outer surface. These materials are derived from plants and decompose into water and carbon dioxide through microorganisms in nature over time. This way it contributes to solving the problem of plastic waste, which causes worldwide concern.

In addition to its environmentally friendly functions, the high sealing performance, processability, and flexibility of BioPBSTM as well as the durability and printability of AZ-1 were deciding factors in the adoption of these materials.



SHISEIDO Clear Suncare Stick

Outer surface of the pouch

 AZ-1
 ← Gravure printing

 BioPBSTM
 ← Gravure printing

Inner surface of pouch and zipper side

Outer pouch structure (cross-section)

As the demand for environmentally friendly products continue to increase, Mitsubishi Chemical and Futamura Chemical will contribute to building a circular economy society and achieving SDGs through development of these products.

(Reference)

● BioPBSTM is a plant-derived biodegradable resin developed by Mitsubishi Chemical, which owns the basic patent, and manufactured by PTT MCC Biochem Company Limited, which is a fifty-fifty joint venture between Mitsubishi Chemical and PTT Global Chemical of Thailand. Compared to other biodegradable resins, it shows excellent performance in low temperature heat sealability, heat

resistance, and flexibility.

- AZ-1 is a cellulose film manufactured by Futamura Chemical and made from renewable resources (wood pulp). Originally, it was familiarly known as the name of "cellophane" in Japan and has a wide lineup.
- Click <u>here</u> to visit the SHISEIDO official website and <u>here</u> to read the details about Clear Suncare Stick.

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