

Shiseido Becomes World's First to Develop Sustainable Replaceable Cosmetics Packaging Using LiquiForm®

- Reducing CO₂ emissions by approximately 70% versus our existing replaceable packaging -

Shiseido Company, Limited ("Shiseido") aims to realize a sustainable world where everyone can enjoy a lifetime of happiness through the power of beauty by 2030 under its corporate mission "BEAUTY INNOVATIONS FOR A BETTER WORLD". At the same time, we are proposing new value in the Skin Beauty business, in which we are focusing our efforts, and working together with consumers to contribute to the reduction of environmental impact.

Now, Shiseido has developed a new replaceable packaging for cosmetics that contributes to the reduction of environmental impact by applying LiquiForm®, a technology that realizes "bottle-molding" and "filling" in a single step, into cosmetics for the first time in the world. LiquiForm® is a new packaging technology developed chiefly by Amcor. In this project, Shiseido worked together with Yoshino Kogyosho Co., Ltd. ("Yoshino Kogyosho"), which has put the technology to practical use, and jointly developed a new cosmetics packaging. By leveraging Yoshino Kogyosho's expertise in manufacturing cosmetics packaging and Shiseido's knowledge in cosmetics manufacturing, including product quality assurance, design property, and specification, we successfully applied LiquiForm® technology to our own cosmetics packaging. The LiquiForm®-based replaceable cosmetics packaging reduces the plastic usage in the packaging itself by about 70% and also reduces CO₂ emissions by approximately 70%*¹ compared to our existing standard replaceable packaging (same volume) throughout the entire supply chain from raw material procurement to production and disposal after use. In addition, its single-material design realizes high recyclability.

We believe that this new packaging will provide an opportunity to think about how to tackle environmental issues and a new option for problem-solving in which consumers can take part. Through our core business of "beauty" value creation, we will continue to work with all of our stakeholders to take action to resolve environmental and social issues. Going forward, Shiseido plans to roll out products in the LiquiForm®-based packaging and expand its application to the Prestige and other brands.

Amcor: <https://www.amcor.com/>

Yoshino Kogyosho: <http://www.yoshinokogyosho.co.jp/> (Japanese only)

*¹ For the purpose of reusing dispensers and outer caps, we offer replaceable refill products with temporary replacement caps for some of our products. This is the result of a comparison between our existing replaceable packaging and Liquiform®-based replaceable packaging of the same volume.



Figure. LiquiForm®-based replaceable cosmetics packaging (left) and its outer packaging (right).

<Reference>

Where the manufacturing process of conventional replaceable packaging includes filling empty, pre-molded bottles with their contents, LiquiForm® technology shapes and fills the bottles simultaneously by heating up the plastic materials that form the bottles to soften them and then using high pressure to inject the contents. This operation eliminates the need to transport empty bottles, which were previously delivered from the bottle molding factory to the filling factory, as well as the concerns over damaging or deforming them during transportation. It also allows the packaging design to be thin, resulting not only in reducing the plastic usage but also in expanding the possible range for packaging design. This leads to premium packaging that assures the consumers' psychological satisfaction in areas such as worldview and a sense of luxury that they seek in cosmetics. Furthermore, the new replaceable packaging developed with Yoshino Kogyosho can be detached from the outer packaging after use and replaced with a new one, allowing the outer packaging to be used repeatedly.