

Announcement of Trial Launch of Liquid Encapsulant for Advanced Packages

Sumitomo Bakelite Co., Ltd. (Headquarters: Shinagawa-ku, Tokyo; President and Representative Director: Shinichi Kajiya) is pleased to announce the development and trial launch of the EME-L series, a liquid encapsulant with low warpage and high reliability, designed to address the increasing size and complexity of semiconductor packages driven by advancements in AI technology.

Background of Development

The rapid proliferation of generative AI has led to increasing demands for semiconductor packages that offer enhanced functionality, faster processing speeds, and greater processing capacity. As a result, the adoption of 2.xD/3D structures and chiplet architectures has accelerated, leading to larger package sizes.

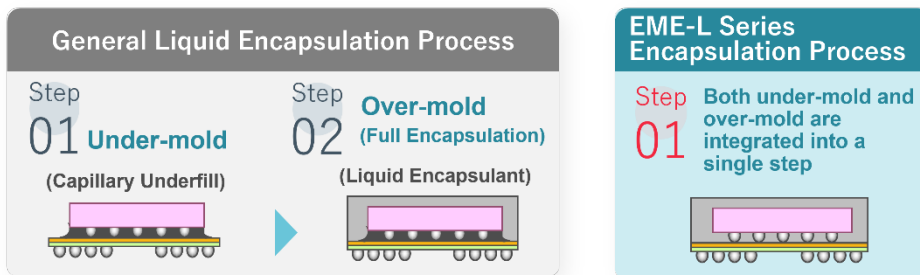
Under these circumstances, achieving larger package sizes while maintaining economic productivity requires liquid encapsulants with improved low warpage characteristics and enhanced processing performance. Responding to strong customer demand, we initiated the development of liquid encapsulant to meet these needs.

Features of the EME-L Series

The EME-L series, our newly developed liquid encapsulant, achieves a balance between low warpage performance and the required processing capabilities by applying our expertise in formulation and compounding technologies cultivated over many years with solid encapsulants, as well as advanced process technologies for liquid products used in electronic materials. The low warpage performance enables easier handling during post-encapsulation processes.



Furthermore, the product lineup includes under-mold capable products, which integrate the under-mold and over-mold (full encapsulation) processes into a single step (refer to the diagram below). This integration reduces manufacturing steps and improves efficiency. These features contribute to the realization of next-generation packages with enhanced functionality and larger sizes.



Future Plans

We commenced trial launches in April 2026, with the goal of achieving certification and adoption in 2027. Moving forward, we will maintain close relationships with our customers while promoting material development from a customer-centric perspective. In addition to our globally leading solid encapsulants, we will also expand our offerings to include liquid encapsulants, delivering innovative functional products that do not yet exist in the market. Through these efforts, we aim to contribute to the advancement of AI technology.

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