

Best Practice

DESIGNED FOR HIGH-TEMPERATURE FILLING: PP-EVOH-PP CUPS FROM ETIMEX FOR DEMANDING HOT-FILL APPLICATION



In Southern Europe, the demand for high-quality fruit purées is steadily growing—whether as a standalone snack, an ingredient, or part of modern convenience products. A well-established producer in the region faced a key challenge: finding a packaging solution that could withstand hot filling, ensure extended shelf life, and meet increasing sustainability requirements. Conventional packaging solutions could only meet these requirements to a limited extent. High filling temperatures often led to deformation, limited barrier performance, or poor recyclability.

The answer was an advanced material concept: PP-EVOH-PP cups from ETIMEX.

A packaging solution designed for High Temperatures

ETIMEX specializes in high-performance, multi-layer polypropylene solutions tailored for demanding food applications. The PP-EVOH-PP structure combines the mechanical and thermal advantages of polypropylene (PP) with the superior barrier properties of EVOH (ethylene vinyl alcohol).

For hot-fill applications, temperature resistance is critical. PP offers excellent heat stability, enabling safe filling at elevated temperatures without compromising the shape or integrity of the cup. This ensures reliable processing and minimizes production risks.

Product protection and sustainability combined

A key performance feature is the integrated oxygen barrier provided by the EVOH layer. It effectively protects sensitive fruit purée from oxidation, preserving flavor, color, and nutritional value while significantly extending shelf life. This is particularly important for export-oriented markets and long distribution chains, which are common in Southern Europe.

Sustainability is another major advantage. The PP-EVOH-PP structure is designed as a polyolefin-based solution with excellent recyclability. In the context of the European PPWR (Packaging and Packaging Waste Regulation), this concept supports compliance with future requirements for recyclable packaging. It offers a forward-looking alternative to complex, non-recyclable multi-material systems.



Efficient processing on existing production lines

From a processing perspective, the ETIMEX cups deliver high efficiency and stability. They run smoothly on existing filling and sealing lines, enabling consistent quality, reduced waste, and cost-effective production.

The result: By implementing the PP-EVOH-PP cup, the customer established and implemented a reliable, high-performance and sustainable packaging solution for premium fruit purées. The combination of hot-fill capability, excellent oxygen barrier, and recyclability strengthens both product quality and market competitiveness.



ETIMEX Primary Packaging stands for innovative polypropylene-based film and packaging solutions. With deep expertise in multi-layer coextrusion, the company develops tailored materials for a wide range of applications. The PP-EVOH-PP technology is a strong example of how performance, efficiency, and sustainability can be combined – meeting the packaging demands of today and tomorrow.

