

# HEAT-RESISTANT COATING FOR MONO-PE POUCHES

SABIC, COVESTRO, VOLPAK & VERPAKKINGSINDUSTRIE VEENENDAAL

SABIC® PE POLYMERS FOR MONO-PE STAND-UP POUCHES  
DESIGN FOR RECYCLABILITY

## INDUSTRY CHALLENGE

Achieving recyclability in multi-material stand-up pouches is a challenge. Mono-material laminate made of BOPE (biaxially oriented polyethylene) and PE is a sustainable solution to replace multi-material laminate; It combines easy recyclability with good optics and optimal mechanical properties.

However, during high-speed form fill seal packaging of stand-up pouches, BOPE laminates can shrink and stick, as they are more sensitive to heat compared to current polyester-based solutions.

## SABIC SOLUTION

In close collaboration with SABIC, Covestro developed a new heat-resistant coating resin technology for BOPE films, engineered specifically for stand-up pouches. This transparent coating, currently in trial phase, has been tested in collaboration with Verpakkingindustrie Veenendaal (VIV) and Volpak, validating a broader sealing temperature window when processing on FFS lines, as it prevents shrinkage of the film and sticking it to heat seal bars.

The new high-performance, recyclable, mono-material stand-up pouch structure with Covestro's heat-resistant coating technology supports the drive to achieve a circular economy for flexible packaging, as it is a viable solution to replace PET or PA laminates in stand-up pouches. It also enables high-speed packaging on FFS lines.



ECONOMICS & PERFORMANCE



CONSUMER CONVENIENCE



DESIGN FOR RECYCLABILITY



PROCESSABILITY



Enabled by

TRUCIRCLE™

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