

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™

CONTACT US

SABIC HEADQUARTERS

PO Box 5101
Riyadh 11422
Saudi Arabia
T +966 (0) 11 225 8000
F +966 (0) 11 2259000
E info@sabic.com

EUROPE

SABIC Europe Head Office

PO Box 5151
6130 PD Sittard
The Netherlands
T +32 (46) 722 2222
F +32 (46) 722 0000
E info@sabic.com

ASIA PACIFIC

SABIC Asia Pacific Head Office

One Temasek Avenue#06-01
Millenia Tower
Singapore 039192
T +65 6557 2555
F +65 6531 8101
E info@sabic.com

SABIC (SHANGHAI) TRADING CO. LTD.

2550, Xiupu Road Pudong
Shanghai 201319
China
T +86 21 2037 8188
F +86 21 2037 8288

UNITED STATES

SABIC Americas Head Office

Suite 650
2500 City West Boulevard
Houston, TX 77042
USA
T +1 713 532 4999
F +1 713 532 4994
E info@sabicamericas.com

DISCLAIMER: THE MATERIALS, PRODUCTS AND SERVICES OF SAUDI BASIC INDUSTRIES CORPORATION (SABIC) OR ITS SUBSIDIARIES OR AFFILIATES ("SELLER") ARE SOLD SUBJECT TO SELLER'S STANDARD CONDITIONS OF SALE, WHICH ARE AVAILABLE UPON REQUEST. INFORMATION AND RECOMMENDATIONS CONTAINED IN THIS DOCUMENT ARE GIVEN IN GOOD FAITH. HOWEVER, SELLER MAKES NO EXPRESS OR IMPLIED REPRESENTATION, WARRANTY OR GUARANTEE (i) THAT ANY RESULTS DESCRIBED IN THIS DOCUMENT WILL BE OBTAINED UNDER END-USE CONDITIONS, OR (ii) AS TO THE EFFECTIVENESS OR SAFETY OF ANY DESIGN OR APPLICATION INCORPORATING SELLER'S MATERIALS, PRODUCTS, SERVICES OR RECOMMENDATIONS. UNLESS OTHERWISE PROVIDED IN SELLER'S STANDARD CONDITIONS OF SALE, SELLER SHALL NOT BE RESPONSIBLE FOR ANY LOSS RESULTING FROM ANY USE OF ITS MATERIALS, PRODUCTS, SERVICES OR RECOMMENDATIONS DESCRIBED IN THIS DOCUMENT. Each user is responsible for making its own determination as to the suitability of Seller's materials, products, services or recommendations for the user's particular use through appropriate end-use and other testing and analysis. Nothing in any document or oral statement shall be deemed to alter or waive any provision of Seller's Standard Conditions of Sale or this Disclaimer, unless it is specifically agreed to in a writing signed by Seller. Statements by Seller concerning a possible use of any material, product, service or design do not, are not intended to, and should not be construed to grant any license under any patent or other intellectual property right of Seller or as a recommendation for the use of any material, product, service or design in a manner that infringes any patent or other intellectual property right.

SABIC and brands marked with ™ are trademarks of SABIC or its subsidiaries or affiliates.

© 2022 Saudi Basic Industries Corporation (SABIC). All Rights Reserved.