Recycle-Ready Barrier Blown Film produced by MDO Technology powered by Mitsui Chemicals



Modern recycling regulations in many countries worldwide increase the need for barrier films with a reduced content of barrier polymers, mainly EVOH, down to less than 5% of the polyolefin-based packaging to enable recyclability in conventional recycling streams. With the use of MDO technology in the blown film process, it is possible to decrease the layer thickness of barrier polymers while maintaining the same OTR barrier level. Stretching with a factor of up to 6x increases the film's barrier properties caused by the molecules' high orientation. Due to the multilayer technology, the characteristics of the final film can be adjusted to the needs of the packed goods.

CUSTOMER BENEFITS

- Increased barrier properties compared to conventional film extrusion
- Better mechanical and optical properties due to the high orientation of the polymer chains
- Good printability even in rotogravure due to the stiff behavior of the stretched PE-film



ADMERTM – Adhesive resin

EVO Ultra Stretch – <u>reifenhauser.com</u>

	MFR (2.16 kg/10min)	Density (g/m³)	Vicat soft. Point (°C)	Melting Point (°C)	Adhesion Performance	Adheres to:
AT1955E	2.6	0.89	62	-	+++	PA ✓ EVOH ✓
NF528E	2.5	0.91	69	121	++	PA ✓ EVOH ✓
CE518E*	3.1	0.91	80	121	++	PA ✓ EVOH ✓

*ISCC Plus certified bio-circular grade

ADMER[™] secures a perfect adhesion between polyethylene and EVOH even after stretching in the MDO process. Its special formulation enables improved elasticity, which helps to prevent a break of the existing bondings inside the film during the solid-state stretching. Its mechanical properties help to balance the films behavior and ensure a long-lasting and stable production campaign on commercial scale lines.

KEY FACTS of ADMERTM

- ✓ ADMER[™] tie is counted as polyolefin in recycling regulations
- Easy extrudable and highly stretchable
- Improved adhesion due to a more elastic structure design

-Contact detail-

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