

# Recycle-Ready Barrier Thermoforming Film produced by Waterquench Technology

powered by Mitsui Chemicals



Modern recycling regulations in many countries worldwide increase the demand 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. As many conventional packaging systems are well-established in the market, it can be challenging to reduce the amount of barrier polymers while maintaining all mechanical, optical and barrier properties of the final packaging. Therefore, a perfect match of high-end Waterquench Technology together with high-performance polymers can create a recycle-ready packaging solution. Both, thermoformable bottom film and flexible lid film can be produced with the same technology on one machine.

## CUSTOMER BENEFITS

- ✓ Recycle-ready PE-based structures without Polyamide to meet current Design4Recycling guidelines
- ✓ Better mechanical and optical properties compared to other conventional film-producing methods due to the amorphous state of the polymer chains
- ✓ Good optical appearance, even with more challenging EVOH extrusion



EVO Aqua Cool – [reifenhauser.com](http://reifenhauser.com)

## ADMER™ – Adhesive Resin – ready-to-use Grades

	MFR (2.16 kg/10min)	Density (g/m <sup>3</sup> )	Vicat soft. Point (°C)	Melting Point (°C)	Adhesion Performance	Adheres to:
NF518E	3.1	0.91	80	121	++	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 thermoforming 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 film's behavior, while its excellent melting behavior and melt homogeneity secure easy processing and uniform optics.

## KEY FACTS of ADMER™

- ✓ 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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