

EVASIN™ EVOH & OREVAC® TIE LAYERS FOR BARRIER PACKAGING

The combination of EVASIN™ EVOH barrier resins and OREVAC® tie layers provides an integrated solution for high-performance multilayer packaging structures.

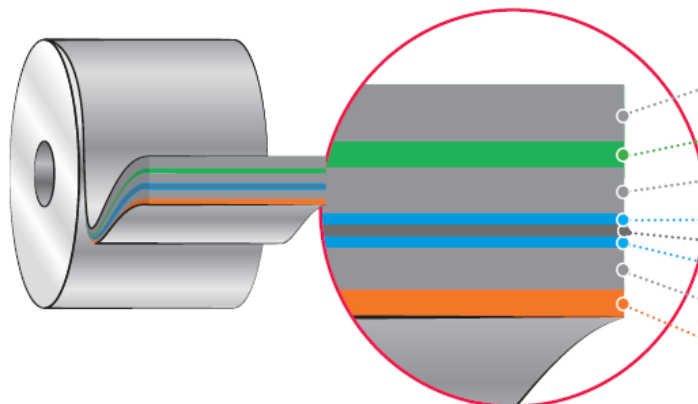
EVASIN™ EVOH: Delivers Barrier Performance

- Outstanding oxygen barrier
- Aroma retention
- Shelf-life extension
- Reduced food waste



OREVAC® TIE LAYERS: Enables Structural Integration

- Strong adhesion between polyolefins and EVOH
- Long-term interlayer bond strength
- Suitable for PE and PP based structures
- Suitable for various coextrusion technologies

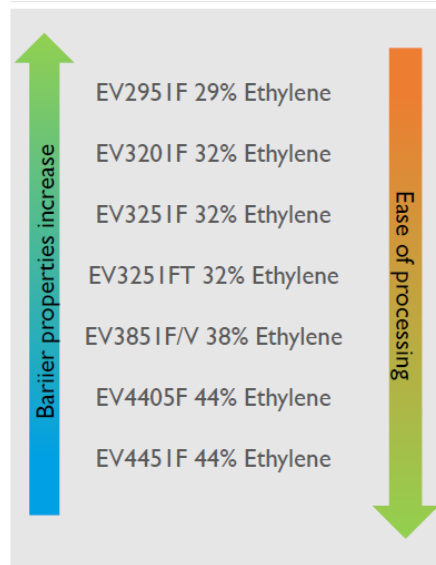


FUNCTION	LAYER	PRODUCT	THICKNESS (μm)
Outer Layer		Yuzex™ HDPE	50
Lamination layer		Lotader® Tie Layer	10
Polyethylene	A	Yuclair™ LLDPE	20
Adhesive	B	Orevac® Tie Layer	4
Barrier	C	Evasin™ EVOH	3
Adhesive	B	Orevac® Tie Layer	4
Polyethylene	A	Yuclair™ LLDPE	20
Sealing		Lotryl® BESTPEEL	10

Note: Yuzex™ HDPE and Yuclair™ LLDPE are brands of SK Geo Centric.

EVASIN PRODUCT RANGE

EVASIN™ : from 29% to 44% ethylene content to adjust barrier properties .



Grade	Ethylene content (mol %)	Melt index (g/10 min)		Melting point (°C)	Crystallization point (°C)	Glass transition point (°C)	O ₂ Transmission Rate (65% RH, 20°C) (cm ³ .20µm/m ² .24hrs.atm)
		190°C–2.16 kg	210°C–2.16 kg				
EV 2951F	29	3	2.5	188	163	62	0.2
EV 3251F	32	1.7	4.01	183	159	60	0.3
EV 3251FT	32	1.9	4.3	183	155	57	0.5
EV 3851F/V	38	1.8	3.9	173	151	57	0.7
EV 4405F	44	5.5	12.0	165	146	55	1.8
EV 4451F	44	1.8		165	146	54	1.8
Test Method		ISO 1133		ISO 11357		ISO 14663-2	

F: Lubricated V: Non lubricated T: For thermoforming

OREVAC® TIE LAYERS for Flexible High-Barrier Packaging

Flexible packaging

- Vacuum bags
- Flow packs
- Doypacks
- Thermolamination films
- Barrier lids
- Skin packaging
- Form-fill-seal structures
- Shrink films
- Thermoforming films
- Agricultural films

Grade	Base Polymer	Reactivity*	MFR	Typical Structure
OREVAC® 18300	LLDPE	++	2.5	PE / OREVAC® / EVASIN™ EVOH / OREVAC® / PE
OREVAC® 18362	LLDPE	+	2.5	PE / OREVAC® / EVASIN™ EVOH / OREVAC® / PE
OREVAC® 18341	LLDPE	+++	1.5	PE / OREVAC® / EVASIN™ EVOH / OREVAC® / PE
OREVAC® OE825	LLDPE	+++	3.0	PE / OREVAC® / EVASIN™ EVOH / OREVAC® / PE
OREVAC® 18722	Random PP	+	7.0	PP / OREVAC® / EVASIN™ EVOH / OREVAC® / PP
OREVAC® 18780	Copo PP	+	18	PP / OREVAC® / EVASIN™ EVOH / OREVAC® / PP
OREVAC® 18729	Homo PP	+	4.5	PP / OREVAC® / EVASIN™ EVOH / OREVAC® / PP
OREVAC® 18211	EVA	+	3.5	OREVAC® / PE / OREVAC® / EVASIN™ EVOH / OREVAC® / PE

Process

- Cast film
- Blown film
- MDO
- Multi-bubble



OREVAC® TIE LAYERS for Rigid High-Barrier Packaging

Rigid packaging

- Thermoformed trays
- Coffee capsules & cups
- Blow molded bottles
- Pharmaceutical packaging
- Pipe / Tube

Grade	Base Polymer	Reactivity*	MI (g/10 min)	Structure Example
OREVAC® 18729	Homo PP	+	4.5	PP/Regrind/OREVAC®/EVASIN™ EVOH/OREVAC®/PP
OREVAC® 18730	Homo PP	+	3.0	PP/Regrind/OREVAC®/PA/OREVAC®/PP
OREVAC® 18780	Copo PP	+	18	PP/Regrind/OREVAC®/EVASIN™ EVOH/OREVAC®/PP
OREVAC® 18211	EVA	+	3.5	PE/Regrind/OREVAC®/EVASIN™ EVOH/OREVAC®/PS
OREVAC® 18362	LLDPE	+	2.5	PE/Regrind/OREVAC®/EVASIN™ EVOH/OREVAC®/PE
OREVAC® 18341	LLDPE	+++	1.5	PE/Regrind/OREVAC®/EVASIN™ EVOH/OREVAC®/PE
OREVAC® OE825	LLDPE	+++	3.0	PE/Regrind/OREVAC®/EVASIN™ EVOH/OREVAC®/PE

Process

- Sheet / thermoforming
- Blown molding
- Tube

