

PP BarrierPro

Polypropylene High-Barrier Sheet · PP/EVOH/PP · Extruded

FOOD GRADE

BARRIER

MAP · Retort · Microwavable

CHARACTERISTICS

- EVOH barrier layer — 3%-8% thickness
- Ultra-low O₂ transmission < 0.30 cc/m²/day
- Ultra-low moisture transmission < 0.20 g/m²/day
- Microwavable and hot-fill capable
- Recyclable · Dual-tone available · Food-grade

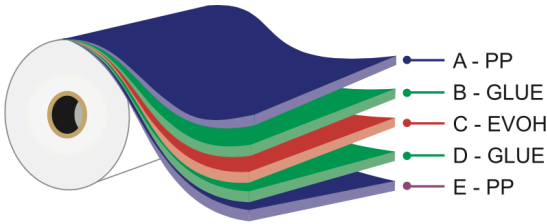
APPLICATIONS

- Sweets, confectionery & dry fruits
- Dairy — flavoured milk, cheese, desserts
- Bakery, snacks & ready-to-eat meals
- Soups, sauces & baby food pouches
- Fruits, vegetables & fresh juice packaging

COMPLIANCE

RoHS · REACH SVHC · FDA Food Contact · Microwavable · Recyclable · ISO 9001:2015

LAYER STRUCTURE



Multi-layer co-extruded barrier structure

Five polymer layers co-extruded in a single pass. The central EVOH core provides the oxygen barrier, bonded by tie layers to structural PP skins on both faces.
Standard supply: PP/EVOH/PP (3-layer). Full 5-layer PP/Glue/EVOH/Glue/PP available on request.

TYPICAL PROPERTIES

All values are typical · ASTM test methods · roll/sheet specimens

PROPERTY	TEST METHOD	VALUE	UNIT
PHYSICAL DATA			
Average Thickness	ASTM D6988	600 - 1800	µm ±3%
Roll Width	ISO 4592	800 - 900	mm ±2
Core ID	ISO 4592	76 / 152	mm
Density	ASTM D792	0.92 ±0.02	g/cm ³
Gloss @ 20°	ASTM D2457	Up to 90	%
EVOH Layer	—	3 - 8	%
SURFACE DATA			
Surface Tension	ASTM D2578	≥ 44	dyne/cm
O ₂ Transmission Rate	ASTM D3985	< 0.30	cc/m ² /day
Water Vapour Trans.	ASTM F1249	< 0.20	g/m ² /day

PROPERTY	TEST METHOD	VALUE	UNIT
LAYER STRUCTURE			
Standard Config.	—	PP/EVOH/PP	—
Full Config.	—	5-layer	PP-G·EVOH·G·PP
Layer Count	—	3 or 5	layers
REGULATORY			
Food Contact	—	Pass	Int'l std
Microwavable	—	Yes	—
Recyclable	—	Yes	—
PROCESSING			
Thermoforming Temp.	—	150 - 170	°C
Max. Storage Temp.	—	45 ± 5	°C
Storage Humidity	—	≤ 75	% RH

NOTES

Values from internally verified PP High-Barrier sheet production specifications. Thickness tolerance ±3%.
O₂ and Water Vapour Transmission Rates per ASTM D3985 and F1249 on final formed sheet.
EVOH layer 3-8% adjustable per application need.
Food-grade per international standards. Microwavable.
Values typical. Validate suitability for application.

PERFORMANCE PROFILE

< 0.30 cc/m²/d O₂ transmission rate	< 0.20 g/m²/d Water vapour barrier
3-8 % EVOH barrier layer	0.92 g/cm³ Density — lightweight

PP BarrierPro — extended shelf-life barrier for food-safe thermoforming.

PRODUCTION SPECIFICATIONS

Sheet Thickness	600 - 1800 µm	24 - 70 mils · ±3% tolerance
Roll Width	800 - 900 mm	32-35 inch · ±2 mm
Layer Structure	PP / EVOH / PP	5-layer PP/Glue/EVOH/Glue/PP on request
EVOH Content	3 - 8 %	Adjustable per barrier requirement
Surface	T05 Plain Smooth	Gloss up to 90% @ 20°
Colour	Any colour or Clear	 + custom Pantone/RAL match

HOW TO READ THESE NUMBERS

• O₂ Transmission Rate Oxygen through the sheet per day. <0.30 = excellent barrier. • Water Vapour Trans. Moisture through per day. <0.20 = strong moisture lock. • EVOH Layer % Barrier core thickness as % of total. Higher = better O₂ barrier. • Surface Tension ≥44 dyne/cm — ensures good ink, coating & seal adhesion.	• Density 0.92 g/cm³ — lighter than PET/HIPS, reduces pack weight. • MAP & Retort Ready Locks in gas mix for shelf life; withstands sterilisation. • Microwavable PP layers are microwave-safe for ready-to-eat trays. • Thickness Tolerance ±3% gauge control — consistent forming across the roll.
---	---

STELLAR-EX

Sheet Extrusion Excellence

INDU THERMOFORMERS PVT. LTD. / FORMPACK

Plot No. 6 & 45, Vasai Taluka Co-op Estate, Sector 1, Gaurai-pada, Vasai East, Palghar 401208, India

+91-250-2456774 / 75 · sales@induthermoformers.com · www.induthermoformers.com

DOC: TDS-PPBPRO-2026-01 · Rev 01 · Issue: May 2026 · Page 1 of 1 · Stellar-Ex™ — a brand of Indu Thermoformers

ISO 9001 : 2015

Quality Management Certified

GSTIN 27AADCM9861D1ZA

Established 1985