

TECHNICAL DATA SHEET (TDS)

Product Name: Three-Side Seal Pouch (Food Grade)

Material Structure: MOPP (25%) / VMPET (12%) / PE (63%)

Certifications: ISO 9001:2015, IFS Food v7, BRCGS Packaging (Grade AA/B)

1. Material Composition & Functional Properties

Layer	Material	Proportion	Key Function
Outer Layer	MOPP	25%	High gloss, excellent printability, moisture resistance
Barrier Layer	VMPET	12%	Superior oxygen/UV barrier, extends shelf life
Sealing Layer	PE	63%	FDA/EU-compliant heat seal, flexibility

2. Critical Performance Data

Barrier Properties

- Oxygen Transmission Rate (OTR): $<1.0 \text{ cc/m}^2/\text{day}$ (23° C, 0% RH)
- Water Vapor Transmission Rate (WVTR): $<1.5 \text{ g/m}^2/\text{day}$ (38° C, 90% RH)

Mechanical Strength

- Tensile Strength (MD/TD): $\geq 100/90 \text{ N/mm}^2$ (ISO 527-3)
- Heat Seal Strength: $\geq 30 \text{ N/15mm}$ (ASTM F88, 120° C – 140° C)

Temperature Resistance

- Storage: -30° C to +50° C
- Sealing Range: 120° C – 140° C (recommended)

3. Compliance & Safety

- Food Contact: Compliant with FDA 21 CFR 177.1520 (PE) & EU 10/2011
- Heavy Metals: <100 ppm (EU 94/62/EC)
- Recyclability: PE layer supports recycling (local scheme dependent)

4. Customization Options

- Printing: Flexographic/Gravure/Digital (Corona treatment ≥ 40 dynes/cm)
- Features: Resealable zippers, tear notches, Euro slots
- Design: Custom sizes (e.g., 80×60mm, 100×70mm) and artwork

5. Target Applications

- ✓ Dry Foods: Snacks, spices, cereals
- ✓ Liquids: Sauces, dairy (seal integrity validated)
- ✓ Sensitive Products: Pharmaceuticals, pet food (UV protection via VMPET)

6. Handling & Storage

- Conditions: 15 – 25 ° C, RH <60% (avoid sunlight)
- Shelf Life: 24 months (unprinted pouches in original packaging)
- MOQ: 5,000 – 20,000 units (varies by design)

7. Quality Assurance

- Batch Testing: OTR/WVTR, seal strength, migration limits (<10 mg/dm² for fatty foods)
- Documentation: COA (Certificate of Analysis), DoC (Declaration of Compliance) provided

Notes

- For high-acid/fatty foods, additional migration testing is recommended.
- Full traceability (resin lots, metallization logs) for BRC/IFS audits.