

## TECHNICAL DATA SHEET

# ES-GF Series

## High Adhesion Metallized PET Film

### Product Description

The ES-GF series offers enhanced aluminum adhesion strength, making it ideal for demanding lamination and composite packaging applications. With Al adhesion up to  $\geq 3.0$  N/15mm (GF01 grade), it can replace traditional aluminum foil structures while maintaining full compliance with FDA, EU, REACH, and RoHS standards.

### Key Features

- Al adhesion  $\geq 2.2$  N/15mm (ES-GF) /  $\geq 3.0$  N/15mm (ES-GF01)
- Can replace aluminum foil structures for cost reduction
- FDA / EU 10/2011 / REACH / RoHS fully compliant
- Increased Al thickness without peeling risk
- Excellent printability and lamination compatibility

### Applications

Food Packaging | Dairy Products | Coffee Bags | Snack Bags | Pet Food | Flexible Packaging

### Technical Specifications

| Property                  | Unit                                   | ES-GF      | ES-GF01    |
|---------------------------|--|------------|------------|
| Thickness                 | $\mu\text{m}$                          | 12         | 12         |
| Al Adhesion               | N/15mm                                 | $\geq 2.2$ | $\geq 3.0$ |
| Surface Tension (Al side) | mN/m                                   | $\geq 48$  | $\geq 48$  |
| WVTR (38°C, 90% RH)       | $\text{g}/\text{m}^2\cdot 24\text{h}$  | $\leq 1.5$ | $\leq 0.8$ |
| OTR (23°C, 0% RH)         | $\text{cc}/\text{m}^2\cdot 24\text{h}$ | $\leq 1.5$ | $\leq 0.8$ |

Available:  $6\mu\text{m}$ – $100\mu\text{m}$  thickness. FDA / EU / REACH / RoHS compliant.

### Compliance & Certifications

ES-GF series meets international food contact material regulations including US FDA 21 CFR, EU Regulation No. 10/2011, REACH (EC 1907/2006), and RoHS Directive 2011/65/EU. Certificates of

compliance available upon request.

## Packaging & Storage

Standard packaging: Roll form, wrapped in PE film, packed in carton box with foam protection. Store in a cool, dry environment (temperature below 35°C, humidity below 75% RH). Avoid direct sunlight. Shelf life: 12 months from date of manufacture under proper storage conditions.

## Customization

Available thickness: 6µm – 100µm. Width and length are fully customizable to your production requirements. Contact our sales team for custom specifications, sample requests, or technical consultation.

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Document: TDS-ES-GF | Rev: 1.0 | Date: 2026-04-01

This document is for reference only. Actual specifications may vary. Contact us for detailed testing data.