

mLLDPE**mLLDPE mPE-F181ZU****METALLOCENE LINEAR LOW-DENSITY POLYETHYLENE (mLLDPE)**

A metallocene-catalyzed linear low-density polyethylene (mLLDPE) blown-film extrusion grade produced using a single-site catalyst system under gas-phase (condensed-mode) polymerization, giving a narrower molecular-weight and comonomer distribution than conventional Ziegler-Natta LLDPE film resins. This narrow-distribution structure supports higher optical clarity, dart-impact strength and puncture resistance at reduced gauge, positioning the grade for agricultural film and heavy-duty packaging film applications where downgauging and toughness are priorities.

Typical Application

- Agricultural (greenhouse) film
- Heavy-duty packaging film
- Downgauged blown film requiring high dart impact and puncture resistance

Product Characteristics

- Single-site metallocene catalysis for narrow molecular-weight and comonomer distribution
- Improved optical clarity versus conventional Ziegler-Natta LLDPE film grades
- Enhanced dart impact, tear and puncture resistance suited to film downgauging

Physical Properties

Properties	Test Method	Typical Value	Unit
Melt Flow Rate (190°C/2.16 kg)	ASTM D1238	0.7	g/10 min
Density	ASTM D1505	0.918	g/cm ³

Processing Guidelines

Suitable for conventional blown-film extrusion lines; process conditions should be adjusted per line configuration to leverage the narrow molecular-weight/comonomer distribution for gauge reduction while maintaining bubble stability.

1. Values per the producer's published synthetic-resins brochure for this specific grade (MFR 0.7 g/10 min, density 0.918 g/cm³, packaging/agricultural film application).

2. Full per-grade technical data and a certificate of analysis are supplied with each order.