

LLDPE

LLDPE 7050

LINEAR LOW DENSITY POLYETHYLENE (LLDPE)

This is a butene-comonomer linear low-density polyethylene grade designed for the blown-film process, offering high gloss and excellent draw-down. Films made from this resin have very good tensile and toughness properties, with anti-block and slip additives built into the formulation for reliable bag- and film-line performance.

Typical Application

- Agricultural film
- Bag-in-box packaging
- Food packaging films
- Form-fill-seal (FFS) packaging films
- Garment bags
- Liner bags
- Multi-layer packaging films
- Cast film

Product Characteristics

- High gloss
- Excellent draw-down in blown-film applications
- Very good tensile and toughness properties
- High anti-block level, medium slip
- Thermally stabilised

Film Properties

Properties	Test Method	Typical Value	Unit
Dart Drop Impact	ASTM D1709A	66	g
Elmendorf Tear Strength (MD/TD)	ASTM D1922	85/400	g
Gloss (45°)	ASTM D2457	76	
Haze	ASTM D1003	4.4	%

Physical Properties

Properties	Test Method	Typical Value	Unit
Melt Index (190°C/2.16 kg)	ASTM D1238	2	g/10 min
Density	ASTM D792	0.918	g/cm ³
Tensile Stress at Yield (MD/TD)	ASTM D882	11/10	MPa
Tensile Stress at Break (MD/TD)	ASTM D882	49/29	MPa
Elongation at Break (MD/TD)	ASTM D882	600/800	%
Secant Modulus - 1% Secant (MD/TD)	ASTM D882	190/220	MPa

1. The nominal properties reported herein are typical of the product and do not reflect normal testing variance; they should not be used for specification purposes.

2. Film properties measured on 25.4 µm (1 mil) thick film at a blow-up ratio of 2.5; optical properties measured on a 25.4 µm (1 mil) film without anti-block, with 10% LDPE added, at the same conditions.

3. Density of 0.918 g/cm³ reflects this generic anti-block/slip butene-LLDPE recipe as produced across licensed plants; the nominal density typically quoted for this grade is 0.922 g/cm³.

4. Shares its published family datasheet with grade 7050H (same anti-block/slip formulation).