

## Linear Low Density Polyethylene FM31D

### Description:

The FM31D resin is a Linear Low Density Polyethylene for blown film extrusion. It has excellent mechanical properties, especially hot tack. It contains processing aid, antiblock, slip and antioxidant additive.

### Application:

General purpose pure and blends; laminating and automatic packaging of solids and liquids.

### Process:

Blown Film Extrusion

### Control Properties:

	ASTM Methods	Units	Values
Melt Flow Rate (190/2.16)	D 1238	g/10 min	1.0
Density	D 792	g/cm <sup>3</sup>	0.919

### Typical Properties:

Blow Film Properties<sup>b</sup>

	ASTM Methods	Units	Values
Tensile Strength at Break (MD/TD)	D 882	MPa	30/20
Elongation at Break (MD/TD)	D 882	%	860/1200
Tensile Modulus – 1% Secant (MD/TD)	D 882	MPa	170/220
Dart Drop Impact	D 1709	g/F50	130
Elmendorf Tear Strength (MD/TD)	D 1922	gF	50/760
Haze	D 1003	%	10
Gloss - Angle 60°	D 2457	%	120

(a) 40 µm Film Gauge, obtained in 40 mm extruder with blow up ratio of 2,2:1 . (MD: Machine direction; TD: Transversal direction).

### Recommended Processing Conditions:

The FM31D resin can be processed with polyethylenes on conventional extruders with a maximum ratio of 30%. The best results of low melt index.

The recommended temperature profile for blends with LDPE is slightly higher than those ones for the conventional LDPE is slightly higher than those ones for the conventional LDPE (10 to 20°C).

Recommended blow up ratio: 1,8 to 3,0:1.

