

Low Density Polyethylene EB853

Description:

EB853 low density polyethylene produced under high pressure in a Tubular reactor. Films obtained with this product show outstanding optical properties, good sealability, and low gel content.

Applications:

Typical blown film applications include films for diapers and other general purposes as well as LLDPE and HDPE blends.

Process:

Blown and Cast Film Extrusion

Control Properties:

	ASTM Method	Units	Values
Melt Flow Rate (190°C/2.16kg)	D 1238	g/10 min	2.7
Density	D 1505	g/cm ³	0.923

Properties:

Blown Film Properties^a

	ASTM Methods	Units	Values
Tensile Strength at Break (MD/TD)	D 882	MPa	25/20
Elongation at Break (MD/TD)	D 882	%	350/1050
Dart Drop Impact	D 1709	g/F50	80
Elmendorf Tear Strength (MD/TD)	D 1922	gF	ND ^b /210
Haze	D 1003	%	7
Gloss - Angle 60°	D 2457	%	75

(a) obtained in 75 mm extruder, blow up ratio 2:1, die gap 1,0 mm and 40 µm thickness.

(b) ND: Not Determined.

Recommended Processing Conditions:

Blown Film Extrusion

- Extruder:

Screw - relation L/D.....16 a 30:1

Compression Ratio.....3 a 4:1

- Screw pack (Mesh).....40/60/40

- Temperature Profile

1^a zone.....110°C

Extruder150°C

Die.....160°C

- Blow up ratio:.....from 2 to 3:1

- Frostline Height.....maximum equivalent to bubble diameter

