

Low Density Polyethylene BC818

Description:

BC818 is a grade produced under high pressure in an autoclave reactor. In the coating process it presents very good optical properties, low neck-in, good film stability, and good adhesion on porous substrate. Without additives.

Applications:

Extrusion coating; injection of general parts and carrier for masterbatches.

Recommended process conditions:

Extrusion coating

- Extruder type:

Screw W/D ratio 20:1

Compression ratio, 3 to 4:1

- Temperature profile on horizontal extruder:

Barrel, from 150 to 340°C

Control Properties:

	ASTM Method	Units	Values
Melt Flow Rate (190/2.160)	D 1238	g/10 min	8.3
Density	D 1505	g/cm3	0.918

Properties:

Blow film Properties^a

	ASTM Method	Units	Values
Tensile Strength at Break (MD/TD)	D 882	MPa	25/20
Elongation at Break (MD/TD)	D 882	%	380/870
Flexural Modulus – 1% Secant	D 882	MPa	70
Dart Drop Impact	D 1709	g/F50	70
Elmendorf Tear Strength (MD/TD)	D 1922	gF	NDb/56
Haze	D 1003	%	8
Gloss - Angle 60°	D 2457	%	76

(a) LDPE: 70 µm thick film, obtained from a 40 mm extruder, with blow up ratio of 2.2:1, die gap 1.8 mm (MD = Machine Direction and TD = Transversal Direction).

(b) ND: Not Determined

