

Low Density Polyethylene PB681

Description:

The PB681 is a resin produced under high pressure, in tubular reactor. This resin presents excellent 'draw down'(stability to form fine films). The films produced with this resin present excellent optical properties.

Additive:

Non additives are present.

Applications:

LLDPE and HDPE blends.

Process:

Blown Film Extrusion

Cast Film Extrusion

Injection Molding

Control Properties:

	ASTM Method	Units	Values
Melt Flow Rate (190/2.160)	D 1238	g/10 min	3.8
Density	D 1505	g/cm3	0.922

Properties:

Blow Film Properties^a

	ASTM Methods	Units	Values
Ultimate Strength (MD/TD)	D 882	MPa	23/14
Elongation at Break (MD/TD)	D 882	%	370/875
Dart Drop Impact	D 1709	g/F50	75
Elmendorf Tear Strength (MD/TD)	D 1922	gF	685/265
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. (MD: Machine direction; TD: Transversal direction).

(b) ND: Not Determined.

Recommended Processig Conditions:

Blown Film Extrusion

- Equipment type:

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

Compression rate.....3 to 4:1

Screen package(Mesh).....40/60/40

-Temperature profile:1st zone.....110 °C

From the screw to the die.....140 °C

Die.....150 °C

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

- Frostline height.....at most equivalent to the bubble diameter



Cast Film Extrusion

- Equipment type:

Screw - L/D relation.....at least 20:1

Screw.....from 180 to 250°C

Die.....from 250 to 290°C

- Chill Roll.....40°C

Injection Molding

- Temperature profile.....180 to 220°C

- Mold temperature.....5 to 25°C

Final Remarks:

1. This resin meets the requirements for olefin polymers as defined in 21 CFR, section 177.1520 issued by FDA – Food and Drug Administration in force on the date of publication of this specification. The additives present are covered in appropriate regulation by FDA.
2. These information reflect typical values obtained in our laboratories, but should not be considered as absolute or as warranted values. Only the properties and values mentioned on the Certificate of Quality are considered as guarantee of the product.
3. In some applications, Braskem has developed tailor-made resins to reach specific requirements.
4. In case of doubt regarding utilization, or for other applications, please contact our Technical Assistance.
5. For information about safety, handling, individual protection, first aids and waste disposal, please see MSDS. CAS Registry number: 009002-88-4
6. The mentioned values in this report can be changed at any moment without Braskem previous communication.
7. Braskem does not recommend this grade for packages, parts or any kind of product manufacture that will be used for storage or contact with solution that will have internal contact with human body.
8. The content of this Data Sheet replaces previous revisions published for this product.
9. This resin does not contain the substance Bisphenol A (BPA, CAS # No. 80-05-7) in its composition.