

Low Density Polyethylene LD4003

Description:

LD4003 is a Low Density Polyethylene produced under high pressure conditions in a tubular reactor. It offers good processability and excellent mechanical and optical properties.

Additives:

Slip and Antiblock

Application:

Films for general purposes, technical films for automatic packaging and blends with LLDPE.

Process:

Recommended processing conditions for film extrusion about 150 -165 °C. The optimum processing conditions will vary according to the type of equipment used and cannot be considered as performance guarantee.

Control Properties:

	ASTM Methods	Units	Values
Melt Flow Rate (190/2.16)	D 1238	g/10 min	1,9
Density	D 792	g/cm3	0.922

Typical Properties:

Blow 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	%	590/920
1% Secant Modulus (MD/TD)	D 882	MPa	145/150
Dart Drop Impact	D 1709	g/F50	140
Elmendorf Tear Strength (MD/TD)	D 1922	gF	460/300
Haze	D 1003	%	7
Gloss - Angle 45°	D 2457	%	79
Gloss - Angle 60°	D 2457	%	116

(MD = Machine Direction; TD = Transversal Direction)

(a) 70 µm thickness film, processed in a 70 mm blow film line with barrier screw. 25:1 L/D and a 1,2 mm die gap at a 2,2:1 blow up ratio.

Recommended Processing Conditions:

Cast Film Extrusion

- Temperature Profile:.....from 150 to 165°C
- Blow up Ratio:.....from 2,0 to 4,5: 1
- Screw - relation L/D.....16 a 30:1

Final Remarks:

- The information presented in this Data Sheet reflects 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.
- In some applications, Braskem has developed tailor-made resins to reach specific requirements.
- In case of doubt regarding utilization, or for other applications, please contact our Technical Assistance.
- For information about safety, handling, individual protection, first aids and waste disposal, please see MSDS. Cas Registry number: 9002-88-4.
- The mentioned values in this report can be changed at any moment without Braskem previous communication.
- 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.
- The content of this Data Sheet replaces previous revisions published for this product.
- This resin does not contain the substance Bisphenol A (BPA, CAS # No. 80-05-7) in its composition.