Low Density Polyethylene TX7001

Description:

TX7001 is a low-density polyethylene (LDPE) with high molecular weight, designed to satisfy those applications that require high mechanical strength and environmental stress cracking resistance (ESCR), together with good processability, proper of branched polyethylene produced by a high-pressure process. TX7001 resin presents an excellent performance in conventional LDPE extruders, granting low energy consumption during the whole process and allowing the production of packaging with a good dimensional uniformity and an excellent surface finishing. This product is identified as PE 115 according to ASTM D-4976-04a standard specification.

Additives:

No additives

Application:

High resistance films for industrial packaging, heavy duty bags and plastic canvas.
Base resin for agriculture films with big dimensions.

Process:

Blown Film Extrusion

Control Properties:

	ASTM Methods	Units	Values
Melt Flow Rate (190/2.16)	D 1238	g/10 min	0.14
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	25/25
Elongation at Break (MD/TD)	D 882	%	350/940
2% Secant Modulus (MD/TD)	D 882	MPa	150/170
Dart Drop Impact	D 1709	g/F50	230
Elmendorf Tear Strength (MD/TD)	D 1922	gF	180/200
Haze	D 1003	%	24
Gloss - Angle 45º	D 2457	-	32
Gloss - Angle 60º	D 2457	-	40

(MD = Machine Direction; TD = Transversal Direction)
(a) 70 µm thickness film, processed in a 50 mm blow film line with barrier screw. 25:1 L/D and a 1,0 mm die gap at a 2,3: 1 blow up ratio.

Recommended Processing Conditions:

Blow Film Extrusion

-Temperature Profile:.....from 170 to 225°C
-Mass Temperature:..... from 190 to 225°C
-Blow up Ratio:.....from 2,0 to 3,0:1
-Die Gap:.....1,0 to 1,5 mm

The optimum processing conditions will vary according to the type of equipment used and cannot be considered as performance guarantee.

Final Remarks:

1. 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.
2. In some applications, Braskem has developed tailor-made resins to reach specific requirements.
3. In case of doubt regarding utilization, or for other applications, please contact our Technical Assistance.
4. For information about safety, handling, individual protection, first aids and waste disposal, please see MSDS. Cas Registry number: 9002-88-4.
5. The mentioned values in this report can be changed at any moment without Braskem previous communication.
6. 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.
7. The content of this Data Sheet replaces previous revisions published for this product.
8. This resin does not contain the substance Bisphenol A (BPA, CAS # No. 80-05-7) in its composition.