Braskem

Datasheet
08/05/2020

High Density Polyethylene GP100BLXP

Description:

GP100BLXP is a High Density Polyethylene compound specially developed for the manufacturing of extruded pipes for water distribution. It is produced with bimodal technology and has high molar mass. It shows excellent mechanical properties and resistance to hydrostatic pressure and stress cracking. This resin has MRS (Minimum Required Strength) of 10 MPa, according to ISO 9080, and is classified as PE 100, according to ISO 12162. GP100BLXP is manufactured in blue color and contains additives to protect it against ultraviolet radiation action and photodegradation. Meets the requirements of NBR 15561:16 and ISO 4427:07.

Applications:

PE100 classification in blue color, Water branch lines, Distribution and adductor water systems, Pressurized pipes

Processes:

Pipes Extrusion

Control Properties:

Feature	Method	Units	Values
Melt Flow Rate (190°C/5kg)	D 1238	g/10 min	0.25
Density	D 792	g/cm³	0.949

Typical Properties - Plaque[1]:

Plaque Properties

Feature	Method	Units	Values
Tensile Strength at Yield (a)	D 638	MPa	24
Elongation at Yield (a)	D 638	%	10
Tensile Strength at Break (a)	D 638	MPa	38
Elongation at Break (a)	D 638	%	1400
Flexural Modulus - 1% Secant (b)	D 2240	-	1030
Shore D Hardness (c)	ASTM D 2240	-	65
Izod Impact Strength (b)	D 256	J/m	NB
Environmental Stress Cracking Resistance - notch 0,3 mm; 50°C; 10% Igepal CO630 (a)	D 1693	h/F50	> 1000
Deflection Temperature under Load at 0.455 MPa (b)	D 648	ºC	67
Vicat Softening Temperature at 10 N (b)	D 1525	°C	126

[1] Test specimens from compression molded plaque according to ASTM D4703. Plaque Thickness: a) 2mm. b) 3mm c) 6mm. NB = No break.

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. For regulatory information of the product, please refer to Regulatory Document or contact our Technical Assistance Area.
3. For information about safety, handling, individual protection, first aids and waste disposal, please refer to MSDS.
4. The mentioned values in this report can be changed at any moment without Braskem previous communication.