Braskem

Datasheet
23/09/2019

High Density Polyethylene GM5255

Description:

GM5255 is a high density polyethylene developed for the production of corrugated pipes. It is produced with bimodal technology and shows excellent mechanical properties and resistance to stress cracking, high resistance to oxidative degradation and excellent processability.

Applications:

Single and double wall corrugated pipes for unpressurised sewage and rainwater drainage, Energy and Telecom subducts, Blends for irrigation pipes

Processes:

Pipes Extrusion

Control Properties:

Feature	Method	Units	Values
Melt Flow Rate (190°C/2.16kg)	D 1238	g/10 min	0.20
Melt Flow Rate (190°C/21.6kg)	D 1238	g/10 min	24
Density	D 792	g/cm³	0.951

Typical Properties - Plaque[1]:

Plaque Properties

Feature	Method	Units	Values
Tensile Strength at Yield (a)	D 638	MPa	24
Tensile Strength at Break (a)	D 638	MPa	34
Flexural Modulus - 1% Secant (b)	D 2240	-	1220
Shore D Hardness (c)	D 1693	h/F50	62
Izod Impact Strength (b)	D 256	J/m	105
Environmental Stress Cracking Resistance - notch 0,3 mm; 50°C; 10% Igepal CO630 (a)	D 1693	h/F50	240
Environmental Stress Cracking Resistance - notch 0,3 mm; 50°C; 100% Igepal CO630 (a)	ASTM D 1693	h/F50	> 1000
Deflection Temperature under Load at 0.455 MPa (b)	D 648	ºC	69
Vicat Softening Temperature at 10 N (b)	D 1525	°C	125
OIT (200°C)	D 3895	min	> 25
NCLS	F 2136	h	> 50

[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.