


Data Sheet

Aug/21

High Density Polyethylene HT4219
Description:

HT4219 is a high density polyethylene developed especially for the production of thin-walled irrigation pipes with excellent processability and low gel content, as well as in the production of medium and high wall thickness pipes. The resin can be used neat or in blends with LLDPE and HDPE.

Applications:

Pipes for irrigation

Processes:

General extrusion.

Control Properties:

Characteristic	Method	Units	Values
Melt Flow Rate (190°C/21.6kg)	ASTM D 1238	g/10 min	20
Density	ASTM D 792	g/cm ³	0.943

Typical Properties - Plaque¹:

Plaque Properties

Characteristic	Method	Units	Values
Melt Flow Rate (190°C/2,16kg)	ASTM D 1238	g/10 min	0.15
Tensile Strength at Yield (a)	ASTM D 638	MPa	23
Elongation at Yield (a)	ASTM D 638	%	10
Tensile Strength at Break (a)	ASTM D 638	MPa	30
Elongation at Break (a)	ASTM D 638	%	1480
Flexural Modulus - 1% Secant (b)	ASTM D 790	MPa	860
Shore D Hardness (c)	ASTM D 2240	-	62
Environmental Stress Cracking Resistance - notch 0,3 mm; 50°C; 10% Igepal CO630 (a)	ASTM D 1693	h/F50	> 1000
Deflection Temperature under Load at 0.455 MPa (b)	ASTM D 648	°C	58
Vicat Softening Temperature at 10 N (b)	ASTM D 1525	°C	122

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

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 Area.
- For information about safety, handling, individual protection, first aids and waste disposal, please see MSDS.
- 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 of contact with solutions what will have internal contact with human body.