


Datasheet

Nov/2021

High Density Polyethylene HS4506

Description:

HS4506 is a High Density Polyethylene specially developed for the manufacturing of blow molding fuel tanks. It has high molar mass and shows excellent processability. Besides, it shows excellent tenacity, high resistance to stress cracking, and outstanding impact resistance.

Applications:

Cold start tanks, Mono and multilayer fuel tanks for cars, Sheets extrusion for pick up trunk protector

Processes:

Extrusion Blow Molding

Control Properties:

Feature	Method	Units	Values
Melt Flow Rate (190°C/21.6kg)	D 1238	g/10 min	5
Density	D 792	g/cm ³	0.945

Typical Properties - Plaque¹:

Plaque Properties

Feature	Method	Units	Values
Tensile Strength at Yield (a)	D 638	MPa	24
Elongation at Yield (a)	D 638	%	11
Tensile Strength at Break (a)	D 638	MPa	38
Elongation at Break (a)	D 638	%	1550
Flexural Modulus - 1% Secant (b)	D 2240	-	930
Shore D Hardness (c)	D 1693	h/F50	63
Izod Impact Strength (b)	D 256	J/m	NB
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	°C	62
Vicat Softening Temperature at 10 N (b)	D 1525	°C	125

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