Braskem

Data Sheet
Review 3 (Apr/15)

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.

Application:

Mono and multilayer fuel tanks for automobiles; small volume automotive reservoirs; sheet extrusion for pickup rear protectors.

Process:

Blow Molding.

Control Properties:

	ASTM Method	Units	Values
Melt Flow Rate (190/21.6)	D 1238	g/10 min	5.0
Density	D 792	g/cm3	0.945

Typical Properties:

Plaque Properties[a]

	ASTM Method	Units	Values
Tensile Strength at Yield	D 638	MPa	24
Tensile Strength at Break	D 638	MPa	38
Flexural Modulus – 1% Secant	D 790	MPa	930
Shore D Hardness	D 2240	-	63
Notched Izod Impact Strength	D 256	J/m	700
Environmental Stress Cracking Resistanceb	D 1693	h/F50	> 1000
Deflection Temperature under Load at 0.455 MPa	D 648	ºC	62
Vicat Softening Temperature at 10 N	D 1525	°C	125
Elongation at Yield	D 638	%	11
Elongation at Break	D 638	%	1550

(a) Test specimens prepared from compression molded sheet made according to ASTM D 4703.
(b) Compression molded 2 mm thickness, 0.3 mm notched-plaques; 100% Igepal; 50ºC.

Final Remarks:

1. This resin meets the requirements for olefin polymers as defined in 21 CFR, section 177.1520 issued by FDA – Food and Drug Administration in force on the date of publication of this specification. The additives present are covered in appropriate regulation by FDA
2. 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.
3. In some applications, Braskem has developed tailor-made resins to reach specific requirements.
4. In case of doubt regarding utilization, or for other applications, please contact our Technical Assistance.
5. For information about safety, handling, individual protection, first aids and waste disposal, please see MSDS. CAS Registry number: 25213-02-9.
6. The mentioned values in this report can be changed at any moment without Braskem previous communication.
7. 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.
8. The content of this Data Sheet replaces previous revisions published for this product.
9. This resin does not contain the substance Bisphenol A (BPA, CAS # No. 80-05-7) in its composition.