Braskem

Data Sheet

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.