Braskem

Data Sheet

High Density Polyethylene HT5303

Description:

HT5303 is a high density polyethylene developed for the manufacturing of corrugated pipes. It exhibits an appropriate balance between stiffness, impact and stress cracking resistance, as well as a high resistance to oxidative degradation.

Application:

Corrugated pipes for energy and telecom cables protection and for drainage of roads and sports fields.

Process:

Pipe Extrusion.

Control Properties:

	ASTM Method	Units	Values
Melt Flow Rate (190/2.16)	D 1238	g/10 min	0.30
Melt Flow Rate (190/21.6)	D 1238	g/10 min	26
Density	D 792	g/cm3	0.954

Typical Properties:

Plaque Properties[a]

	ASTM Method	Units	Values
Tensile Strength at Yield	D 638	MPa	30
Tensile Strength at Break	D 638	MPa	33
Flexural Modulus – 1% Secant	D 790	MPa	1140
Shore D Hardness	D 2240	-	64
Notched Izod Impact Strength	D 256	J/m	100
Environmental Stress Cracking Resistanceb	D 1693	h/F50	43
Environmental Stress Cracking Resistancec	D 1693	h/F50	168
Vicat Softening Temperature at 10 N	D 1525	ºC	66
Deflection Temperature under Load at 0.455 MPa	D 648	ºC	128
OIT at 200oC	D 3895	min	> 25
NCLS - Notched Constant Ligament Stress	F 2136	h	> 24

(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. 10% Igepal. 50ºC.
(c) Compression molded 2 mm thickness, 0.3 mm notched-plaques. 100% Igepal. 50ºC.