Braskem

Data Sheet

Linear Low Density Polyethylene HF3712

Description:
The HF3712 resin is a Linear Low Density Polyethylene indicated for the production of geomembranes. It shows excellent resistance to environmental stress cracking (ESCR), good processability and melt strength.

Additive:
Lubricant – Antioxidant.

Application:
Geomembranes.

Recommended Processing Conditions:
The HF3712 resin should be processed on specific extruders. The optimum processing conditions will vary according to the type of equipment used, but the best results are obtained at a melt temperature within the range of 175 to 195ºC.

Control Properties:

	ASTM Methods	Units	Values
Melt Flow Rate (190/21.6Kg)	D 1238	g/10 min	10.5
Density	D 1505	g/cm3	0.937

Typical Properties:
Plaque Properties[a]

	ASTM Methods	Units	Values
Tensile Strength at Yield	D 638	MPa	19
Elongation at yield	D 638	%	12
Tensile Strength at Break	D 638	MPa	28
Elongation at Break	D 638	%	1289
Tensile Modulus – 1% Secant	D 790	MPa	682
Shore D Hardness	D 2240	-	56
Izod Impact Strength 23°C	D 256	J/m	735
Vicat Softening Temperature at 50 N	D 1525	°C	62
Deflection Temperature under Load at 0.455 MPa	D 648	ºC	54
Environmental Stress Cracking Resistanceb	D 1693	h/F50	>1500
ESCR SP-NCTL	D 5397	Hours	>900

(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.