

## Linear Low Density Polyethylene HF3712

### Description:

The resin HF3712 is a polyethylene suited for geomembranes production. Due to its high molecular weight this product has an excellent balance of mechanical properties and processability.

### Control Properties:

Feature	Method	Units	Values
Melt Flow Rate (190°C/21.6kg)	D 1238	g/10 min	10.5
Density	D 792	g/cm <sup>3</sup>	0.937

### Typical Properties:

Reference properties

Feature	Method	Units	Values
Melt Flow Rate (190°C/5kg)	ASTM D1238	g/10 min	0.38
Tensile Strength at Yield (a)	ASTM D 638	MPa	19
Elongation at Yield (a)	ASTM D 638	%	12
Tensile Strength at Break (a)	ASTM D 638	MPa	30
Elongation at Break (a)	ASTM D 638	%	1400
Flexural Modulus - 1% Secant (b)	ASTM D 790	MPa	682
Hardness (c)	ASTM D 2240	Shore A / D	56
Izod Impact Strength (b)	ASTM D 256	J/m	NB
Environmental Stress Cracking Resistance - notch 0,3 mm; 50°C; 10% Igepal CO630 (a)	ASTM D 1693	h/F50	1500
Deflection Temperature under Load at 0.455 MPa (b)	ASTM D 648	°C	54
Vicat Softening Temperature at 10 N (b)	ASTM D 1525	°C	118
OIT (200°C)	ASTM D 3895	min	> 100

<sup>1</sup> Test specimens from compression molded plaque according to ASTM D4703. Plaque Thickness: a) 2mm. b) 3mm c) 6mm. NB = No break.

<sup>2</sup> Braskem has tested Environmental Stress Cracking Resistance (ESCR) based on standard quality control procedure, ASTM D 1693. Values indicated are for reference only and are not intended for specification purposes. Product performance for geomembranes must be validated by the Customer/Buyer as it is their sole responsibility to carry out tests and ensure that the product is adequate for the specific application.

### Final Remarks:

1. 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.
2. For regulatory information of the product, please refer to Regulatory Document or contact our Technical Assistance Area.
3. For information about safety, handling, individual protection, first aids and waste disposal, please refer to MSDS.
4. The mentioned values in this report can be changed at any moment without Braskem previous communication.